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August 14, 2009

Marianne Holleman
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2501 West Dunlap Avenue, Suite 210
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Subject: **Biological Resources Letter Report**
Horizon Tower Cellular Facility CA1017, Littlepage Lane
County of San Diego Project Number MUP P08-013
Ramona, Unincorporated San Diego County, California

Dear Ms. Holleman:

At the request of Horizon Tower and the County of San Diego (County), Michael Brandman Associates (MBA) has completed a Biological Resources Letter Report for Horizon Tower cellular facility CA1017 (Littlepage Lane), herein referred to as project site or site, located in an unincorporated portion of San Diego County. The proposed project is being processed by the County of San Diego as Case Number P08-013.

The subject letter report addresses the findings of a literature review and reconnaissance-level survey conducted as part of a biological resources impact analysis of the project site and surrounding area. The report also details the potential for sensitive biological resources to occur on the site, and analyzes the proposed project against relevant local, state, and/or federal policies as they pertain to biological resources. Recommended mitigation measures according to these policies are provided herein.

This report has been prepared by a San Diego County-approved consultant, in accordance with the County of San Diego requirements and guidelines for conducting a biological resources study.

If you have any questions or concerns regarding this report, please do not hesitate to contact me at 714.508.4100.

Sincerely,

Karl L. Osmundson
Project Manager/Biologist
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Enclosures: Exhibit 1: Regional Location Map
Exhibit 2: Local Vicinity USGS Map
Exhibit 3: Local Vicinity Aerial Map
Exhibit 4: Soils Map
Exhibit 5: Biological Resources Map
Attachment A: Species Compendium
Attachment B-1: Sensitive Plant Species Table
Attachment B-2: Sensitive Wildlife Species Table
Attachment C: Site Photographs
Attachment D: CNDDB Field Survey Form

TM/KLO

SECTION 1: SUMMARY

A biological resources impact analysis was conducted for the proposed Horizon Tower cellular facility, CA1017 (Littlepage Lane), as required by the County of San Diego Department of Planning and Land Use (County DPLU) in application for a Major Use Permit (MUP). The proposed project is a small, unmanned cellular facility located off Littlepage Lane, east of the community of Ramona in unincorporated San Diego County, California.

The total acreage surveyed for the subject effort was 2.09 acres, which includes portions of the private residential property supported by Assessors Parcel Number (APN) 286-111-048. This is herein referred to as the survey area. As currently planned, the development footprint for the proposed project will result in 0.09 acre of impacts to oak woodland and disturbed habitat. This 0.09-acre area is herein referred to as the project impact area. Approximately 0.07 acre of the project impact area will occur within oak woodland habitat and within 50 feet of existing oak trees (*Quercus* spp.). The 0.07 acre of project impacts to oak woodland habitat will occur as a result of construction of a 40' X 40' (1,600 square feet) equipment area, which represents 0.04 acre of permanent solid ground disturbance impacts to the oak woodland, and telecommunication and power utility line trenching, which represents 0.03 acre of temporary ground disturbance impacts to the oak woodland. No portions of the 0.07-acre project impact area that occurs within the oak woodland will result in the removal of any oak trees. Project-related ground disturbances, including trenching, that occur within 50 feet of the canopy of an oak tree and within an area mapped as oak woodland are considered potential significant impacts to the oak woodland and shall be mitigated for at a 3:1 ratio (Ehsan, pers. comm.). The remaining 0.02 acre of the total 0.09 acre project impact area will result from utility trench route within areas mapped as disturbed habitat, and although within 50 feet of oak woodland canopy, these 0.02 acre of trenching-related impacts to disturbed habitat are not considered significant and do not require compensatory habitat-based mitigation.

The oak woodland within the survey area supports four Engelmann oak trees (*Quercus engelmannii*), all of which will be avoided by the proposed project. In addition, the disturbed habitat and oak woodland within the survey area provides marginal foraging habitat for twelve special status wildlife species. None of these special status wildlife species are federally- or state-listed as threatened or endangered. One of the twelve special status wildlife species, orange-throated whiptail (*Aspidoscelis hyperythra*), was observed within a rock outcrop in the southeastern portions of the survey area. The trees and shrubs contained within the oak woodland and Eucalyptus woodland/ornamental habitat that surrounds the project impact area also provide marginally suitable habitat for nesting bird species protected under California Fish and Game Code (CFG Code) and the federal Migratory Bird Treaty Act (MBTA).

The habitat assessment survey also included a focused habitat assessment for the Quino checkerspot butterfly (*Euphydryas editha quino*) in order to adequately address the potential for this species to occur on or in the immediate vicinity of the proposed impact area. This species is not likely to occur within the survey area due the absence of host plants for this species larval stage and a lack of abundant foraging resources.

Project-related impacts to 0.07 acre of oak woodland shall be mitigated for at a 3:1 ratio (0.21 acre) at an offsite location, which may include The Daley Ranch Conservation Bank or another approved mitigation bank in the region. Offsite habitat acquisition would reduce impacts to oak woodland habitat and the twelve non-listed special status species with the potential to forage within the impact area to less than significant. Additionally, all brushing, clearing and/or grading within 500 feet of nesting raptor habitat and/or 300 feet of migratory bird nesting habitat shall

be restricted to periods outside of the breeding season for raptors and migratory birds. Breeding season avoidance would reduce potential impacts to nesting birds and raptors protected under the MBTA and CFG Code to less than significant.

SECTION 2: INTRODUCTION

The proposed project is currently in application for a Major Use Permit pursuant to § 6980 et al. of the County of San Diego's Zoning Ordinance and thus is required to provide a thorough analysis of all potential on and offsite impacts through preparation of a Californian Environmental Quality Act (CEQA) level biological resources assessment. Per the request of the San Diego County Department of Planning and Land Use, a biological resources assessment was prepared to meet the survey requirements for 63 sensitive plant and wildlife species and address any potential project impacts to native vegetation or other sensitive natural resources.

2.1 - Project Site Location

The project site is generally located north of Interstate (I) 8, south of State Route (SR) 78, east of SR-67, and west of SR-79 (Exhibit 1). The site is depicted on the Ramona, California United States Geological Survey (USGS) 7.5-minute topographic map (Exhibit 2). The site is specifically located north of Littlepage Lane, within the grounds of an existing rural residential property and private residence at 26652 Littlepage Lane (Exhibit 3).

2.2 - Project Description

Horizon Tower proposes to construct a small unmanned cellular telecommunications facility that will provide extended service to the local area. The proposed project is in application with the County DPLU as MUP 08-013. The proposed project generally includes the development of an antenna structure, equipment, and utility line trenching within the grounds of an existing private residence (see Exhibit 5).

The proposed project specifically includes 12 panel antennas mounted at 42 feet onto a new 35-foot tall faux broadleaf monotree, installation of 6 new equipment cabinets, a new above-ground cable tray to provide coaxial connection between the antennas and the equipment, and associated underground trenching for electrical and telecommunications (telco) utility lines. The faux broadleaf tree and equipment cabinets will be enclosed within an approximate 40-foot by 40-foot lease area, surrounded by a 6-foot tall concrete perimeter wall (see Exhibit 5 and Attachment C: Site Photographs).

Underground utility line trench routes for electrical and telco services have been designed to follow a new 12-foot wide non-exclusive access path. Trenching for electrical and telco utility lines will run for approximately 70 feet southwest, from the equipment shelter to an existing utility pole. Excavation requirements for the proposed underground utility line trenching will be limited to trenches with dimensions of approximately 2 feet 6 inches deep by 2 feet wide to accommodate joint and single conduits (see Exhibit 5 and Attachment C: Site Photographs).

Main access to be utilized during the construction stage of the proposed project is provided via Littlepage Lane and the main entrance to the existing residence. Additional construction access and staging opportunities are provided via existing dirt access roads and disturbed areas within the rural residential property that will allow access to the equipment from the existing residential road. The proposed project does not require any fire clearing requirements and is contained within the maintained grounds of an existing residential property.

SECTION 3:METHODOLOGY

Analysis of the biological resources associated with the project site began with a thorough review of relevant literature followed by a reconnaissance-level survey of the site and immediate vicinity.

3.1 - Literature Review

Prior to the habitat assessment survey, a literature review was conducted of the environmental setting of the project site and vicinity. The literature review provides a baseline from which to evaluate the biological resources potentially occurring on the project site, as well as the surrounding area. For reference, the San Diego County Sensitive Plant and Wildlife Lists were reviewed for habitat assessment requirements as well as habitat suitability elements for 63 sensitive plant and wildlife species provided by the County of San Diego for review. The County of San Diego's Resource Protection Ordinance was reviewed for all applicable regulatory policy and potential mitigation requirements for the project.

The literature review also included aerial photographs of the project site and vicinity, as well as the topographic electronic and hard copies of the Ramona, California USGS 7.5-minute topographic quadrangle map.

In addition, a compilation of sensitive plant and wildlife species and their habitats that have been recorded in the vicinity of the project site was derived from the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDB), a sensitive species and plant community account database. MBA conducted a query of the CNDDB for the Ramona and Santa Ysabel, California USGS 7.5-minute topographic quadrangles.

The California Native Plant Society (CNPS) online inventory database was also queried for the project site and vicinity. The CNPS online inventory provided additional sensitive species information for many species that have not been reported to the CNDDB database. Other references used for the subject analysis include "Rare Plants of San Diego County" by Craig Rieser, posted for the San Diego Chapter of the Sierra Club's website (http://sandiego.sierraclub.org/rareplants/), and "San Diego Native Plants" by James Lightner.

3.2 - Habitat Assessment Survey

MBA Biologists Karl Osmundson and Tommy Molioo conducted a reconnaissance-level survey of the project site on June 12, 2008. The survey area encompassed an approximately 2.09-acre area, which included the project footprint and an approximately 100-foot area surrounding the perimeter of the project footprint. The area was surveyed on foot in order to document existing conditions, identify suitable habitat for sensitive plant and wildlife species, and analyze potential direct and indirect impacts to sensitive biological resources based on current project plans. Special attention was directed to portions of the survey area that may provide suitable habitat for the 63 sensitive plant and wildlife species provided for analysis by the County.

The habitat assessment survey also included a focused habitat assessment for the Quino checkerspot butterfly, in order to adequately address the potential for this species to occur on or in the immediate vicinity of the project site.

Parameters assessed regarding the habitat requirements for the 63 sensitive plant and wildlife species include the presence of suitable physical characteristics in topography, vegetation and plant community compositions, and soils. Additionally the presence of suitable nesting, roosting, foraging, including suitable prey base, or dispersing habitat was assessed. Any evidence of previous disturbance on the project site was carefully documented.

The locations of previously documented observations for the 63 sensitive plant and wildlife species were identified and plotted onto aerial and topographic maps to determine connectivity of suitable habitat and/or likely dispersing routes between the locations of observations and the project site. Habitat descriptions, plant communities, and a list of plant and wildlife species observed during the survey were recorded in a Floral and Fauna Compendium (Attachment A).

SECTION 4:HABITAT ASSESSMENT RESULTS

4.1 - Weather Conditions

The reconnaissance-level survey was conducted on June 12, 2008, between the hours of 1015 and 1114. Weather conditions during this survey included mostly clear skies and a temperature of 75 degrees Fahrenheit, with winds ranging from approximately 4 to 5 miles per hour out of the west.

4.2 - Existing Conditions

Investigation of the survey area confirmed that the proposed facility will be constructed entirely within previously disturbed grounds of an existing private residence. The survey area is primarily characterized by disturbed land dominated by non-native grasses and ruderal (weedy) species that extend into the understory of the periphery of fragmented oak woodlands. Several stands of mature ornamental trees and rocky outcrops occur within survey area as well. General land use beyond the survey area consists of scattered rural residences and open space to the south, east and west. Scattered rural residences and agriculture fields occur to the north of the project site.

4.2.1 - Topography and Soils

The survey area occurs within a relatively flat upland area at an elevation of approximately 2,600 feet above mean sea level west of the community of Santa Ysabel and east of the community of Ramona. Higher elevations continue further to the east of the site toward Dye Mountain and further south of the site toward Mount Gower.

The survey area contains one soil map unit belonging to the Cieneba soil series. A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thickness, arrangement, and other important characteristics. The project site contains Cieneba rocky coarse sandy loam, 9 to 30 percent slopes, eroded (Exhibit 4). No other mapped soil series are present onsite.

The observed surface soils throughout the majority of the survey area have been significantly altered from their natural state as a result of development of the private residence, and associated landscaping and maintenance. These soils contain evidence of previous clearing of vegetation, and subsequent scraping and compaction, most likely as a result of construction activities for the private residence, but also as a result of the creation of fire breaks and clean-up activities around the existing residence during the 2007 wildfires.

4.2.2 - Disturbance

The proposed project is located within the grounds of an existing private residence that has been subject to a number of disturbances including vegetation clearing and soil disturbance from previous construction and maintenance activities, dumping, storage, regular foot traffic, vehicular use, and use by domestic dogs. Additionally, the entire survey area and immediate vicinity contain extensive evidence of recent disturbance associated with the 2007 wildfires.

4.2.3 - Habitats/Vegetation Communities

Installation of the proposed facility will occur within portions of three plant communities: disturbed habitat, Eucalyptus woodland/ornamental, and oak woodland (disturbed understory). The Biological Resources Map (Exhibit 5) provides detailed mapping of these communities within

the survey area, which includes the proposed impact area and approximately 100 feet beyond the proposed impact area. A complete description of each community based on Holland and Oberbauer, and extent to which it occurs within the survey area is provided below. The respective Holland code for each community is provided in parenthesis below following each community section name. A complete list of plant species observed within the survey area during the habitat assessment survey is provided in Attachment A. Site photographs depicting the proposed project in relation to the existing conditions can be found in Attachment C.

Disturbed Habitat (11300)

Disturbed habitat or disturbed land includes areas in which the vegetative cover comprises less than 10 percent of the surface area (disregarding natural rock outcrops) and where there is evidence of soil surface disturbance and compaction from previous legal human activity; or where the vegetative cover is greater than 10 percent, there is soils surface compaction, in addition to the presence of building foundations and debris (e.g. irrigation piping, fencing, old wells, abandoned farming or mining equipment) resulting from legal activities (as apposed to illegal dumping). Vegetation within disturbed land will have a high predominance of non-native or weedy species that are indicators of soil disturbance, such as Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), horehound (*Marrubium vulgare*), and sow thistle (*Sonchus oleraceus*), and a sub-dominance of non-native grasses.

Approximately 0.97 acres of disturbed habitat occurs within the survey area. The proposed project development footprint occurs within approximately 0.02 acre of disturbed habitat associated with graded and compacted areas of the private residence (Exhibit 5). These areas contain mainly bare ground with sparsely scattered ruderal species and non-native grasses. Plant species observed include disturbance-tolerant species such as deerweed (*Lotus scoparius*), saw-toothed goldenbush (*Hazardia squarosa*), short-pod mustard (*Hirschfeldia incana*), telegraph weed, wild oat (*Avena fatua*) and long-stem stork's bill (*Erodium botrys*). The disturbed land onsite provides poor quality habitat for plant and wildlife species.

The disturbed habitat within the survey area has been subject to previous unnatural and natural disturbances that include vegetation clearing, soils disturbance, and dumping, as well as a recent wildfire. Evidence of these disturbances extend throughout the majority of the survey area including the understory of the surrounding oak woodland community.

Oak Woodland (71100)

Oak woodland is a sclerophyllous woodland community containing a mix of several oak tree species. Its canopy ranges from 30 to 75 feet tall and may be open or closed. This community is typically found on north-facing slopes or in shaded ravines. The understory is usually dominated by grass species or covered with leaf litter and has a poorly developed shrub layer.

Approximately 1.10 acres of oak woodland occurs within the survey area. Approximately 0.07 acre of the proposed project development footprint occurs within the oak woodland within the survey area (Exhibit 5). Engelmann oaks (*Quercus engelmannii*) scattered with a few coast live oaks (*Quercus agrifolia*) characterizes the oak woodland community within the survey area. Understory herbaceous species observed include red brome (*Bromus madritensis* ssp. *rubens*), yellow-star thistle (*Centaurea solstitialis*), common phacelia (*Phacelia distans*), and shortpod mustard (*Hirshfeldia incana*). The understory of this community, although heavily disturbed, shows evidence of new growth of shrub species including holly-leaf cherry (*Prunus ilicifolia* ssp. *ilicifolia*) and laurel sumac (*Malosma laurina*). In general, the habitat quality of the oak woodland community onsite is considered moderate, and provides limited nesting and foraging opportunities for wildlife species.

Eucalyptus Woodland/Ornamental (11100)

Eucalyptus woodland/ornamental is a non-native vegetation community characterized by a mix of non-native ornamental trees, shrubs, and groundcover species, often dominated by ornamental gum trees (*Eucalyptus* sp.). Physical structure and canopy ranges from low growing to tall, sparse to dense, often with a high species diversity. This community is associated with previously cultivated areas including parks, agricultural windrows, residential properties, and other urban landscapes.

Approximately 0.02 acre of Eucalyptus woodland/ornamental occurs within the survey area. No portions of the proposed project development footprint occur within the Eucalyptus woodland/ornamental vegetation (Exhibit 5). A single mature gum tree and mature Pine tree (*Pinus* sp.) occur within portions of the oak woodland community in the eastern portions of proposed impact area, and various ornamental shrubs occur in the western portions of the survey area toward the two-story home for the private residence. Plant species observed within the eucalyptus woodland/ornamental community include a variety of non-native ornamental, shrub, and tree species typical of ornamental landscaped areas.

4.2.4 - General Wildlife

The survey area and vicinity provide habitat for wildlife species that commonly occur in disturbed oak woodland communities. Avian species observed or detected during the survey include house finch (*Carpodacus mexicanus*), American crow (*Corvus brachyrhynchos*), Anna's hummingbird (*Calypte anna*), lesser goldfinch (*Carduelis psaltria*), California towhee (*Pipilo crissalis*), and spotted towhee (*Pipilo maculatus*). Mammalian species observed or detected during the survey include California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), and domestic dog (*Canis familiaris*). A single reptilian species was detected within the survey area; orange-throated whiptail (*Aspidoscelis hyperythra*). A complete list of wildlife species observed on and in the immediate vicinity of the survey area is provided in Attachment A.

SECTION 5:SPECIAL STATUS SPECIES

5.1 - Special Status Plant and Wildlife Species

As provided by the County of San Diego records, a list of 63 special status plant and wildlife species was reviewed and analyzed. Two special status species tables have been prepared (Attachments B-1 and B-2) that detail the 63 special status plant and wildlife species, their legal status under endangered species acts, preferred habitat, detection results onsite, and potential for occurrence.

Special Status Plant Species

A single special status plant species, Engelmann oak, was determined to be present within the oak woodland habitat that occurs within limited portions of the survey area (see Exhibit 5). Engelmann oak is designated by the CNPS as a List 4.3 plant species and the County of San Diego as a List D plant species. A CNPS list species is assigned a status value by the CNPS based on rarity indices of List 1A, List 1B, List 2, List 3, or List 4, and a level of endangerment value for each rarity index of 0.1, 0.2, or 0.3. A CNPS List 4.3 species is defined by the CNPS as having a rarity index of List 4 (having limited distribution and is rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is currently low) and an endangerment value of 0.3 (not very endangered in California with less than 20 percent of occurrences threatened or no current threats known) (CNPS 2008). None of the individual oak trees that were identified within the survey area occur within the proposed impact area. No other special status plant species were determined to be present or have a high potential to occur within any portion of the survey area.

Special Status Wildlife Species

A single special status wildlife species, orange-throated whiptail (*Aspidoscelis hyperythra*), was determined to be present within a rock outcrop that occurs within a small portion of the survey area (see Exhibit 5). The orange-throated whiptail is not federally- or state-listed as threatened or endangered; however, this species is a California state species of special concern and County of San Diego Group 2 sensitive wildlife species. This species was determined to have a low potential to use the proposed impact area for foraging.

Two special status wildlife species were determined to have a low potential to use portions of the survey area for nesting, including Cooper's hawk (*Accipiter cooperi*) and red-shouldered hawk (*Buteo lineatus*). These two raptor species are not federally- or state-listed is threatened or endangered, or designated as a California state species of special concern; however, they are designated by the County of San Diego as Group 1 sensitive wildlife species. Suitable nesting opportunities within the survey area for these two raptor species is restricted to the oak woodland habitat located outside of the proposed impact area.

Nine additional special status wildlife species were determined to have a low potential to use portions of the survey area and/or proposed impact area for foraging, including coast rosy boa (*Charina trivirgata roseofusca*), coast western whiptail (*Cnemidophorus tigris multiscutatus*), San Diego banded gecko (*Coleonyx variegates abbottii*), northern red diamond rattlesnake (*Crotalus ruber ruber*), large blotched salamander (*Ensatina eschsoltzii klauberi*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), coast patch-nose snake (*Salvadora hexalepis virgultea*), western bluebird (*Sialia mexicana*), black-tailed jackrabbit (*Lepus californicus bennettii*). None of these nine species are federally- or state-listed as threatened or endangered; however, they are designated as California state species of special concern and/or County of San Diego Group

1 or 2 sensitive wildlife species. No other special status wildlife species were determined to be present or have a low, moderate, or high potential to occur within any portion of the survey area.

5.2 - Quino Checkerspot Butterfly

Given the proposed project's location, it has been requested by the County of San Diego that a habitat assessment be conducted in order to adequately address the potential for the Quino checkerspot butterfly (QCB) to occur on or in the immediate vicinity of the project site. The analysis of potential project-related impacts to QCB was based on a thorough literature review of the species life history and population status in San Diego County, the results of the habitat assessment and reconnaissance survey of the site, professional expertise by permitted MBA biologists, and conversations with USFWS entomologists.

The project site is located within a larger region of southern California and San Diego County in which a number of populations of the QCB are known historically to exist each year (CNDDB 2008). According to the USFWS, the project site exists within the Quino Survey Map, recommended survey area for QCB (Carlsbad Fish and Wildlife Office, USFWS Quino Checkerspot Butterfly Protocol and Monitoring Information page http://www.fws.gov/carlsbad/Quino_Monitor.htm, accessed July 2, 2008). According to data provided by the County DPLU GIS Application and records, the USFWS has recorded QCB observations in the general vicinity of the project site.

The following describes the status and habitat requirements of the QCB, and details this species potential for occurrence on the project site based on the existing conditions observed during the June 12, 2008 habitat assessment survey.

Target Species Conservation Status and Biology

The QCB is listed as a federally endangered and County Group 1 species whose populations are continually threatened to near extinction due to habitat loss, changes in climate, displacement of host plants and predation by exotic species. The QCB is a medium-sized butterfly in the Family Nymphalidae and is a subspecies to the Euphydryas editha species. QCB's range encompasses areas within the coastal plain and inland valleys of Los Angeles, Orange, Riverside, and San Diego Counties. QCB are best observed as adults when they are typically most active and flying from February through April. After mating, eggs are deposited by the female as clusters at the base of host plants. Larvae emerge from the eggs and exist in dormancy during a diapause period. Favorable conditions during the fall/winter stimulate the larvae to break diapause and emerge as a caterpillar, after which they experience a pupating stage before emerging again as breeding adult butterflies in spring. Male and virgin female adults can be observed "hill-topping" as a means of mate location and within open areas where host plants occur. This species has been documented within a number of plant community types, including clay soil meadows, native and non-native grasslands, coastal and semi-desert scrubs, and chaparrals with canopy openings supported by clay or cryptogamic crusts. As a vital habitat component, this species requires the presence of host plants in the families Plantaginaceae and Scrophulariaceae; most commonly dwarf plantain (*Plantago erecta*) and purple owl's-clover (*Castilleja exserta*).

Habitat Assessment Results

Currently, the project site and immediate vicinity do not contain the required habitat for QCB. No host plant species for larvae QCB, including Plantago erecta, or any other potential host plants in the families Plantaginaceae and Scrophulariaceae, were observed on or within an approximate 100-foot buffer surrounding the project site. A single Lepidopteran species, cabbage white butterfly (*Pieris rapae*), was observed during the habitat assessment survey.

The disturbed habitat, Eucalyptus woodland/ornamental, and oak woodland habitat within the survey area do not provide suitable conditions for this species or its host plants. The substrates that characterize these areas have either been disturbed by recent fire, or from previous and ongoing clearing, compacting, and dumping activities associated with the existing residence. As a result, the entire understory of the survey area has been established by disturbance-tolerant annual herbaceous species, and primarily shortpod mustard, filaree, deerweed, and non-native grasses. The survey area does not contain soil substrates or rocky outcrops characterized by cryptogamic crusts or other substrates that would promote the establishment of this species host plants. Marginal nectaring and foraging opportunities for adult QCB occur within the survey area. The only flowering annuals and optional nectar sources observed within the proposed impact area include shortpod mustard, common phacelia, and deerweed. These and other foraging resources are more abundant within offsite areas that are characterized by habitat that is less disturbed. No portions of the survey area are highly suitable for basking or "hill-topping" adult species

Determination

The survey area does not contain the required habitat for larvae of QCB, and does not support an abundance of desirable foraging resources, or suitable basking or "hill-topping" habitat for adult species during the flight season. This species is not likely to occur within the survey area or the proposed impact area; therefore, the proposed project is not likely to result in any significant impacts to this species or its habitat.

5.3 - Raptor Foraging

The loss of foraging habitat for raptor species could be considered a significant impact depending on the overall size and nature of the impact, and the functions and values of the affected area relative to other areas in the local and regional vicinity in facilitating raptor use. In general, important raptor foraging areas are characterized by habitat types that are both compatible with foraging behavior (promote appropriate lines of sight, provide unobstructed access to prey, contain adequate perches, etc.) and support an adequate prey base for target raptors with the potential to range through the area. Typically, raptor foraging areas of local and regional importance are not fragmented or constrained by development or other incompatible land uses, and are relatively large in size. Examples of raptor foraging areas of local and regional importance include the large contiguous stand of grasslands within the "Ramona grasslands" and the undeveloped desert scrub habitats in the Borrego Springs area. For year-round resident raptors, important foraging areas may be used frequently and repeatedly, and usually occur in close proximity to nest locations and territories. Wintering raptors with the potential to occasionally range through an area may use multiple foraging sites less frequently along a migratory route and within a wintering location.

In general, the survey area itself does not support the resources that would qualify it as an important area for foraging raptors, especially considering the availability of open habitat that surrounds the survey area in the local vicinity. For nearly all common and sensitive raptors with the potential to occur in the area, the survey area provides relatively poor foraging habitat due to its small size, lack of evident foraging resources, and susceptibility to ongoing disturbances associated with the private property and adjacent residence. The small size of the survey area and confined physical character provide limited space for most raptors to carry out their foraging behaviors and hunting techniques. Larger, wide-ranging raptors that are known to reside or winter in open habitats in the region include species such as northern harrier (*Circus cyaneus*), white-tailed kite (*Elanus leucurus*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), ferruginous hawk (*Buteo regalis*), prairie falcon (*Falco mexicanus*), peregrine

falcon (*Falco peregrinus*), and golden eagle (*Aquila chrysaetos*). These species require less-confined, larger open spaces for foraging than that which characterizes the survey area for behaviors such as soaring, scanning, hovering, kiting, coursing, stooping, and hunting from a perch. These raptor species are not likely to use the survey area for foraging. Smaller raptors that are known to reside or winter within less-open habitats in the region, including species such as the Cooper's hawk (*Accipiter cooperii*) and American kestrel (*Falco sparverius*), are known to forage in mid-air and among woodlands such as the oak woodland habitat that characterizes portions of the survey area and surrounding vicinity. These species forage primarily on the wing by pursuing other bird species in flight and/or flycatching from a perch. Based on the relatively poor habitat quality of the stand of oak woodland that characterizes the survey area, these raptor species have a low potential to use the survey area for foraging.

Due to the fact no raptor species were determined to have a moderate or high potential to forage within the survey area and that project impacts will be limited in size and primarily temporary in nature, impacts to raptor foraging are expected to be less than significant and no mitigation measures are recommended.

5.4 - Nesting Birds

The Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs.

Section 3503 of the California Fish and Game (CFG) Code makes it illegal to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Section 3503.5 further protects all birds in the orders Falconiformes and Strigiformes, birds of prey, such as hawks and owls, and their eggs and nests from any form of take.

Construction of the proposed project will occur in the immediate vicinity of the canopy of a disturbed oak woodland, in addition to low quality ornamental landscape vegetation that provide marginal nesting habitat for common and sensitive bird species protected under the MBTA and CFG Code, including raptors. Therefore, the proposed project may result in potential significant indirect impacts to nesting birds protected under the MBTA and CFG Code.

5.5 - Large Mammal Use

The loss of habitat that is important in facilitating large mammal use could be considered a significant impact depending on the overall size and nature of the impact, project design considerations, and the functions and values of the affected area relative to other areas in the local and regional vicinity in promoting large mammal use. Large- and medium-sized mammals that are known to the region include species such as mountain lion (*Felis concolor*), southern mule deer (*Odocoileus hemionus*), American badger (*Taxidea taxus*), ringtail (*Bassariscus astutus*), bobcat (*Lynx rufus*), striped skunk (*Mephitis mephitis*), and coyote (*Canis latrans*), among others. These species are highly mobile within their home ranges, which can be many square miles in size and encompass a variety of habitat types depending on the species and the availability of resources at any given time throughout the year. For an area to be important in facilitating large mammal use, it should contain the resources necessary to carry out the life history requirements of target large mammal species, including those necessary for breeding, denning, nesting, rearing, pupping, foraging, staging, wintering, concentrating, migrating, and dispersing within or outside of home ranges.

There are a number of anthropogenic factors associated with the survey area and vicinity that would likely deter large mammals from using the area, most notably the presence of man-made barriers (e.g. barbed-wire property fencing, chain-linked fencing, live-in and maintained structures) and domestic pets (e.g. existing dog kennel housing multiple dogs on the property). With the exception of domestic dog, no large mammals were observed and no sign was detected during the survey. When coupled with other contributing factors such as spatial limitations, lack of good quality live-in habitat, lack of foraging resources, lack of accessible water resources, and lack of landscape features (i.e. drainage features, floodplains, valleys, canyons, steep gullied lands, ridgetops, long linear stands of vegetation, riparian corridors, etc.), the survey area and vicinity do not function as having significant importance for large mammal use.

On a local and regional scale, the survey area does not function to support large mammal use. The proposed project is limited in size, and the extent of overall impacts are minimal (less than 0.10 acre). The operational requirements of the proposed project are minimal as well. Due to limiting factors and the fact that project impacts will be limited in size, potential impacts to large mammal use are expected to be less than significant and no mitigation measures are recommended.

SECTION 6: JURISDICTIONAL WETLANDS AND WATERWAYS

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria. USACE regulatory jurisdiction pursuant to Section 404 of the federal Clean Water Act (CWA) is founded on a connection or nexus between the water body in question and interstate commerce. This connection may be direct; through a tributary system, linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the USACE regulations.

6.1 - Waters of the U.S.

USACE jurisdiction over non-tidal waters of the United States extends laterally to the ordinary high water mark (OHWM) or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4). The OHWM is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area" (33 CFR 329.11(a) (1)). Jurisdiction typically extends upstream to the point where the OHWM is no longer perceptible. Recently, the federal courts have restricted USACE jurisdiction over waters that are not directly connected to traditional navigable waters (isolated waters), thereby increasing the focus on clearly establishing the physical connection between the subject water body(ies) as a tributary to traditional navigable waters or otherwise by directly establishing the nexus with interstate commerce.

During the biological assessment survey, the project site was evaluated according to the guidelines provided in the USACE *Jurisdictional Determination Form Instructional Guidebook* (2007) and the *Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest* (2001). Waters of the U.S. are absent from the survey area; no water bodies having a perceptible OHWM were identified within the survey area or immediate vicinity.

No impacts to any waters of the U.S. are expected to occur as a result of the proposed project; therefore, no mitigation is required.

6.2 - USACE Wetlands

The USACE and the Environmental Protection Act (EPA) define "wetlands" as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions." In order to be considered a jurisdictional wetland under Section 404 of the CWA, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. Several parameters may be analyzed to determine whether the criteria are satisfied. During the field survey, the site was evaluated in accordance with the USACE *Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (2006) and the *Wetlands Delineation Manual* (i.e. Environmental Laboratory, 1987).

The survey area occurs within a relatively flat upland area generally characterized by disturbed land and oak woodlands. No natural drainage courses, waterways, and/or wetlands containing hydrophytic plant species were observed on or in the immediate vicinity of the survey area;

therefore, it was not necessary to examine the other two wetland criteria, hydrology and soils, since all three criteria must be met where wetlands are present.

No impacts to any USACE-defined wetlands are expected to occur as a result of the proposed project; therefore, no mitigation is required.

6.3 - County of San Diego Wetlands

The County of San Diego in their County Resource Protection Ordinance define "wetlands" as "All lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or where the land is covered by water. All lands having one or more of the following attributes are wetlands: a) At least periodically, the land supports predominately hydrophytes (plants whose habitat is water or very wet places); b) The substratum is predominately undrained hydric soil; or c) an ephemeral or perennial stream is present, whose substratum is predominately non-soil and such lands contribute substantially to the biological functions or values of wetlands in the drainage system." In this definition, a "non-soil" substrate includes, but is not limited to, rock outcroppings, deepwater habitats, generally greater than 6.6 feet in depth, cobble rock, bedrock, or scoured channels.

The survey area occurs within a relatively flat upland area generally characterized by disturbed land and oak woodlands. No drainage features or depression areas subject to ponding exist on or in the immediate vicinity of the survey area. No hydrophytes were observed during the survey. The underlying substratum of the area is non-hydric, and is mapped as Cieneba rocky coarse sandy loam.

No impacts to any County-defined wetlands are expected to occur as a result of the proposed project; therefore, no mitigation is required.

SECTION 7:OTHER UNIQUE FEATURES/RESOURCES

7.1 - Wildlife Corridors and Linkages

The County of San Diego Guidelines for Determining Significance defines a corridor as "A specific route that is used for movement and migrations of species. A corridor may be different from a Linkage because it represents a smaller or more narrow avenue for movement.", and defines a linkage as "An area of land which supports or contributes to the long-term movement of wildlife and genetic exchange by providing live-in habitat that connects to other habitat areas.". The County of San Diego in their Subarea Plan of the Multiple Species Conservation Program (MSCP) define regional linkages/corridors as "Land which contains topography which serves to allow for the movement of all sizes of wildlife and is used by wildlife, including large animals on a regional scale; and contains adequate vegetation cover providing visual continuity so as to encourage the use of the corridor by wildlife; or It has been identified as the primary linkage/corridor between the northern and southern regional populations of the California gnatcatcher in the population viability analysis for the California gnatcatcher".

The survey area occurs within a relatively flat upland area that is generally characterized by disturbed habitat and fragmented oak woodlands, and is surrounded by constrained open space and scattered rural residences. An existing barbed-wire fence that surrounds the rural residential property that encompasses the survey area currently serves to inhibit access to and from all portions of the property. The local area is void of any topographic features or resources, such as canyon and drainage features, or significant stands of habitat (i.e. riparian corridors, habitat linkages, habitat blocks, etc.) that would promote the movement of wildlife, including large mammals, or migratory or resident birds or raptors.

On a local and regional scale, the survey area does not function as a wildlife corridor or linkage, and the proposed project would not interfere substantially with the movement of native resident or migratory fish or wildlife species, or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites. The proposed project is limited in size, and the extent of overall impacts are minimal (less than 0.10 acre). The operational requirements of the proposed project are minimal as well. Due to the fact that project impacts will be limited in size, impacts to wildlife movement and nursery sites, including corridors and linkages, are expected to be less than significant and no mitigation measures are recommended.

7.2 - Urban/Wildlands Interface and Adjacency Management Issues

An urban/wildlands interface is generally defined as land that presently contains, or will contain as a result of a proposed action, both elements of an urban setting and raw undeveloped land or protected land. This land is situated as such to present a sharply defined physical contrast between the two, potentially creating an adverse edge effect resulting from direct and/or indirect impacts derived from the urban elements. An urban/wildlands interface may be most recognizable in larger multi-use developments that occur within or immediately adjacent to completely undeveloped and undisturbed land that provides habitat for plant and wildlife species in the area.

The survey area is located within the grounds of a private residence surrounded by constrained open space and scattered rural residences. The majority of the land that occurs in the immediate vicinity of the proposed impact area and survey area contains existing developments and/or disturbances that reduce the overall function and value of the habitat that it provides. No design elements are proposed that would result in any significant indirect impacts to any

adjacent undeveloped land or protected land, or any wildlife potentially using the project vicinity. The project will incorporate lighting features that will minimize all lighting to the maximum extent feasible away from the adjacent undeveloped land. External light sources will be designed with internal baffles to direct the lighting towards the ground and have a zero side angle cut off to the horizon.

Due to the limited size and operational requirements of the proposed project, impacts to an urban/wildlands interface are expected to be less than significant and no mitigation measures are recommended.

7.2.1 - Noise-Related Impacts

The proposed project includes specific design features to minimize and reduce any potential noise impacts to biological resources which may result from the project operation. Noise generating equipment for the proposed project will be contained within an enclosed shelter that has been designed to reduce external noise levels. These design features will ensure that operation of the proposed project will achieve compliance with the required noise standards as required by the County. Furthermore, given the proximity to the existing private residence, the proposed project is not expected to result in additional adverse noise levels beyond that which is generated by the existing residential utilities and vehicles.

SECTION 8: SIGNIFICANCE OF PROJECT IMPACTS AND PROPOSED MITIGATION

8.1 - Impact Analysis

This section of the report provides a discussion of potential project-related impacts. Mitigation to reduce these impacts to less than significant is provided in Section 8.2 below.

The 2.09-acre survey area contains a total of 0.97 acre of disturbed habitat, 1.10 acre of oak woodland, and 0.02 acre of Eucalyptus woodland/ornamental. Within the survey area, the proposed project will result in 0.02 acre of impacts to disturbed habitat and 0.07 acre of impacts to oak woodland habitat. Although no oak trees would be removed through installation of the 40' X 40' (1,600 square feet or 0.04 acre) equipment area and portions of the utility line trenching (0.03 acre), project-related ground disturbance that occurs within 50 feet of oak woodland canopy and within an area mapped as oak woodland is considered a significant impact to the oak woodland. However, the 0.02 acre of utility line trenching that occurs within an area mapped as disturbed habitat, although within 50 feet of the oak woodland canopy, is not considered a significant impact and no mitigation is required.

The proposed project has been designed to restrict all impacts to disturbed portions of the private residential property that have been previously cleared and/or excavated, graded, and compacted. Development of the proposed project would include minor clearing, excavation, hand trenching, and backfilling activities that would result in permanent impacts to areas proposed for the equipment enclosure and faux broadleaf monotree, and temporary impacts to areas proposed for the access road, emergency generator parking stall, and power and telco utility line trenching.

Opportunities for project access, haul routes, staging areas, and storage areas occur within existing bare earth access roads and disturbed land contained within the residential property. No significant offsite impacts associated with access, haul routes, staging areas, and storage areas are anticipated to occur due to existing opportunities within disturbed and/or developed areas. Construction methods are anticipated to be largely contained within the existing disturbed areas within the residential property, will be low-impact and non-intrusive, and will either be conducted by hand-trench or low-impact drilling equipment where feasible. Impacts shall be executed in a method to avoid oak trees and associated root systems, and any native shrubs to the greatest extent feasible to further reduce the extent of impacts.

8.1.1 - Habitats/Vegetation Communities

The total existing acres within the survey area and total impact acres resulting from the proposed project to each habitat type are outlined in Table 1.

Table 1: Habitat Type/Vegetation Communities and Impacts

Habitat / Vegetation Community	Existing (acres)	Impacts (acres)	Offsite Impacts (acres)	Mitigation Ratio	Mitigation Required (acres)	Preserved On-Site (acres)	Impact Neutral (acres)	Offsite Mitigation (acres)
Disturbed Habitat	0.97	0.02	-	-	-	-	-	-
Oak Woodland	1.10	0.07	-	3:1	0.21	-	-	0.21
Eucalyptus Woodland/ Ornamental	0.02	0.00	-	-	-	-	-	-
TOTAL	2.09	0.09	-	-	0.21	-	-	0.21

As currently designed, the proposed project will result in ground disturbing impacts to approximately 0.02 acre of disturbed habitat and 0.07 acre of oak woodland. The 0.02 acre of impacts to disturbed habitat will be temporary, resulting from the proposed dirt access road and power and telco utility line trenching. These temporary impacts to disturbed habitat are not considered significant and do not require compensatory habitat-based mitigation. Impacts to oak woodland will result from construction of the 0.04 acre equipment area that contains the faux broadleaf monotree and other facility equipment, and from the installation of 0.03 acre of the project's utility trench route (Exhibit 5). A more detailed discussion of the project's potential affects to oak woodlands is provided below.

Oak Woodlands

Potential impacts to oak woodlands will be limited to that which may result from excavation and installation of the equipment cabinets, concrete footing for the proposed broadleaf monotree, and construction of approximately 0.03 acre of the proposed utility line trench. No other project elements are proposed within the survey area or in the immediate vicinity that are anticipated to result in any impacts within 50 feet of any oak resources.

No oak trees will be removed and no direct impacts will result to any of the vegetation within the oak woodland. Potential impacts to oak trees in the immediate vicinity of the impact area would not result in the mortality of any of the existing oak trees within the woodland. However, according to County policy, any potential ground disturbing impacts that occur to an area mapped as oak woodland is considered a significant impact to the oak woodland. Project-related ground disturbing activities will occur to areas mapped as oak woodland as a result of installation of the equipment lease area and portions of the utility line trench route. Although the proposed project will significantly impact oak woodland habitat, no indirect impacts resulting from any edge effects or loss of biological function and value of the woodland will occur as a result of the proposed project. Furthermore, with no portions of the existing oak woodland being

removed, the project would not provide a significant contribution to the potential additive effects of direct or indirect impacts to oak woodlands over time.

Based on the estimated age of the existing oak trees within the oak woodland, many of these oaks potentially pre-date the development of the existing rural residence, and the oaks in general have sustained potential stresses and disturbances resulting from activities on the rural residential property since its development (not including the recent fire disturbances). Maintenance of the property has resulted in the trimming and thinning of portions of the oak woodland as well, and this is evident by a reduced canopy density and reduced overall coverage of the woodland throughout the property. These previous stresses and disturbances, coupled with the existing residential setting have reduced the relative habitat quality of the woodland when compared to other oak woodland habitat in the local and regional area. As a result, wildlife nesting and foraging opportunities within the woodland are limited by these previous disturbances and stresses, and continue to be constrained by the existing residential setting and routine anthropogenic disturbances.

The following provides a specific oak woodland/oak tree impact analysis for the three major project elements, including the proposed equipment cabinets and broadleaf monotree, the proposed access road and emergency parking generator stall, and the proposed power and telco utility trench.

Equipment Cabinets and Broadleaf Monotree

The 0.04-acre (1,600 square feet or 40 feet x 40 feet) equipment lease area that encompasses the proposed broadleaf monotree and equipment cabinets will require minor excavation for concrete foundation and supporting slab. The excavation requirements for the proposed broadleaf monotree will be limited to a cylindrical vertical column with a diameter of approximately five feet and shallow depths to set the foundation for the monotree structure. The excavation requirements for the proposed equipment cabinets will be limited to two 3 feet wide by 14 feet long rectangular concrete slabs with shallow depths. Due to installation of the equipment cabinets and broadleaf monotree within an area mapped as oak woodland, these project developments are considered a significant impact to the oak woodland. Further discussion of existing oak resources in relation to the proposed project elements is provided below.

The nearest oak resources to these proposed developments occur north, south, and west of the proposed lease area (see Exhibit 5 and Appendix C). Oak resources to the north occur downslope and below the grade of the proposed developments. The proposed developments are set back approximately 60 feet from oak trees in this area. Due to the relatively moderate size of the oak trees to the north (approximately 15 feet tall with an approximate canopy of 15 feet in diameter) and their position downgrade, oak root systems are unlikely to extend upslope into the proposed impact area. Oak resources to the south occur upslope and above grade, approximately 50 feet from the proposed broadleaf monotree and equipment cabinets. The closest oak tree to the south is approximately 20 feet tall with an approximate canopy of 25 feet in diameter. This tree occurs upslope within a rock outcrop, and its root systems are likely confined to the supporting slope, and do not extend downslope into the proposed impact area. Oak resources to the west occur within an elevated granitic outcrop area approximately 50 feet from the project impact area. A larger Engelmann oak tree (approximately 30 feet tall with an approximate canopy of 30 feet in diameter) represents the closest oak tree in the outcrop to the proposed impact area. The root system associated with this oak tree is likely confined within and beneath the existing outcrop area and does not extend into the proposed impact area.

In conclusion, the proposed impact area for the equipment cabinets and broadleaf monotree will occur within the mapped oak woodland. Construction activities associated with the equipment cabinets and the broadleaf monotree will require excavation and belowground disturbance, and therefore represent a permanent solid ground disturbance to the oak woodland. Permanent solid ground disturbance impacts were mapped and quantified following County guidelines and policy protecting oak woodlands (Exhibit 5).

Mitigation Measure MM-1 proposes habitat-based compensatory mitigation that would reduce impacts of 0.07 acre to oak woodland to less than significant.

Access Road and Emergency Parking Generator Stall

The proposed access road and emergency generator parking stall occur within 50 feet of oak resources; however, these project elements do not require any construction excavation or belowground disturbance, therefore no significant impacts are anticipated. Based on the proposed plans for this project element, the access road and emergency generator parking stall will not require concrete or paving. Oak resources in the vicinity of the proposed access road

and emergency parking generator stall include a moderate size (approximately 20 feet tall with an approximate canopy of 25 feet in diameter) coast live oak tree approximately 25 feet to the south of the stall, and a relatively small size (approximately 15 feet tall with an approximate canopy of 15 feet in diameter) Engelmann oak approximately 5 feet to the immediate west of the middle reach of the access road (see Exhibit 5 and Appendix C). No excavation activities or belowground disturbances are proposed in these areas of the oak woodland; therefore no significant impacts are anticipated. The proposed access road and emergency generator parking stall will also be used occasionally for vehicle access to the facility during the operation phase of the project. Potential impacts resulting from vehicle access are not anticipated to exceed that which is currently imposed through vehicular use and maintenance of the area by the existing resident on the property. Therefore, no significant impacts to oak resources are anticipated to occur as a result of the construction and operation of the proposed access road and emergency parking generator stall, and no mitigation measures are proposed beyond that which is proposed within Mitigation Measure MM-1.

Power and Telco Utility Trench

Portions of the power and telco utility trench will occur within 50 feet of oak resources, and within areas mapped as oak woodland. Approximately 0.03 acre of the utility trench route occurs within an area mapped as oak woodland and is considered a significant impact to the oak woodland. The remaining 0.02 acre of trench route will occur within areas mapped as disturbed habitat. Although a portion of the remaining trench route occurs within 50 feet of oak woodland canopy, it is not considered a significant impact to the adjacent oak woodland. A single relatively small size (approximately 15 feet tall with an approximate canopy of 15 feet in diameter) Engelmann oak occurs approximately 5 feet to the immediate west of the middle reach of the proposed trench route (see Exhibit 5 and Appendix C). The maximum excavation requirements for the proposed utilities trenching include uniform trenches with depths of 2-feet 6-inches and widths of 2-feet.

The methodology of the construction of the trench will be carried out with careful consideration for the avoidance of significant belowground oak tree roots, and the design concept of the trench includes spatial accommodations and substrate specificities to allow for variability in the placement of each power or telco conduit throughout the trench column. As a result, added spatial variability in the placement of the conduit into the trench is permitted by the design, subsequently providing the opportunity during the installation of the conduit to avoid and minimize direct impacts to subsurface constraints, such as sensitive root systems. In other words, the conduit run within the trench can be installed around the oak tree roots that will be preserved in the trench. This can be achieved by implementing smaller trenching construction equipment and hand trenching methodologies within areas potentially supporting belowground oak tree roots (i.e. under all oak tree canopies and within 50 feet of the drip line or canopy of any single oak tree).

Any potential ground disturbing impacts, although temporary in nature, to areas mapped as oak woodland habitat are considered a significant impact to the oak woodland. As such, potential impacts to oak woodlands, as a result of utility line trenching, are considered significant to the oak woodland and measures proposed within Mitigation Measure MM-1 will reduce any potential impact to less than significant.

8.1.2 - Special Status Species

Special Status Plant Species

At least four Engelmann oak trees occur within the survey area and within 50 feet of the proposed impact area. As discussed above in Section 8.1.1, no Engelmann oak trees that occur

within the survey area will be removed as a result of installation of the proposed project. However, impacts to Engelmann oak trees may occur due to installation of the proposed trench route, which may result in impacts to roots of these trees. Impacts from trenching are only considered significant when the trench route occurs within the root zone of an oak tree that is mapped as oak woodland. As such, impacts related to Engelmann oaks will be reduced to less than significant through measure provided in Mitigation Measure MM-1, and no additional mitigation is required.

Special Status Wildlife Species

A single wildlife species, orange-throated whiptail, was determined to be present within a rock outcrop that occurs within a small portion of the survey area. No suitable refuge habitat occurs within the proposed impact area, and this species is limited to having a low potential to use the proposed impact area for foraging and/or occasionally using the area for basking. Nine additional special status wildlife species were determined to have a low potential to use portions of the survey area and/or proposed impact area for foraging or basking, including coast rosy boa, coast western whiptail, San Diego banded gecko, northern red diamond rattlesnake, large blotched salamander, San Diego horned lizard, coast patch-nose snake, western bluebird, and black-tailed jackrabbit. All of these ten species are California state species of special concern and/or County of San Diego Group 1 or 2 sensitive wildlife species. The loss of foraging habitat and temporary displacement of individuals during construction activities could be considered significant; however, the large majority of the project impacts will be temporary in nature and will be restricted to disturbed habitat and predominately-bare understory portions of oak woodland. No disturbance or removal of suitable vegetation or other important habitat suitability elements for these species will occur. Potential impacts would be reduced to less than significant with the proposed habitat-based mitigation for the loss of oak woodland habitat and breeding season avoidance mitigation for nesting birds.

Two special status raptor species were also determined to have a low potential to use portions of the survey area for nesting, including Cooper's hawk and red-shouldered hawk. These two raptor species are designated by the County of San Diego as Group 1 sensitive wildlife species. Suitable nesting opportunities within the survey area for these two raptor species is restricted to the oak woodland habitat located outside of the proposed impact area. No direct impacts to any oak resources are anticipated to occur as a result of the proposed project, and potential indirect impacts to these species during nesting would be reduced to less than significant levels with the proposed breeding season avoidance mitigation for nesting birds.

Due to the limited impacts associated with the proposed project (less than 0.10 acre to disturbed habitat and oak woodland) and current disturbances associated with the property that supports the proposed impact area, as well as the fact that no functioning woodland habitat will be removed, potential impacts to special status wildlife species would be considered less than significant with the incorporation of Mitigation Measure MM-1 and MM-2 provided below.

8.1.3 - Nesting Birds

The proposed impact area will occur on and in the immediate vicinity of habitat that supports marginal nesting habitat for common and sensitive bird species protected under the MBTA and CFG code. Therefore, construction activities that will result in the removal of any vegetation or occur in the immediate vicinity suitable nesting habitat may result in potential significant direct and indirect impacts to nesting birds protected under the MBTA and CFG Code.

Mitigation Measure MM-2 provided below will reduce potential project impacts to nesting bird species protected under the MBTA and CFG Code to less than significant.

8.2 - Proposed Mitigation

The following is a list of recommended mitigation measures that will reduce potential project-related impacts to biological resources to less than significant.

8.2.1 - Oak Woodland

As currently designed, the proposed 0.04-acre equipment area that contains the broadleaf monotree and other facility equipment, in addition to the proposed 0.03 acre of trenching that occurs within areas mapped as oak woodland will result in approximately 0.07 acre of ground disturbing impacts to the oak woodland community that will require compensatory mitigation. The following will reduce impacts to oak woodland to less than significant:

MM-1 Habitat-based mitigation for impacts to 0.07 acre of oak woodland shall be mitigated for at a ratio of 3:1 (3.0 acres of mitigation land for every 1.0 acre of habitat impacted) at an offsite location that will be determined through agreements with the County of San Diego, thereby reducing any potentially significant project impacts to this habitat to less than significant. Mitigation banking opportunities for oak woodland are available and should be considered for the project at the Daley Ranch Conservation Bank, or other approved mitigation banks in east San Diego County.

8.2.2 - Nesting Birds

To avoid any direct or indirect impacts to nesting birds pursuant to the MBTA and CFG Code, the Major Use Permit shall include the following condition:

MM-2 The project shall restrict all brushing, clearing and/or grading such that none will be allowed within 500 feet of nesting raptor habitat and/or 300 feet of migratory bird nesting habitat during the breeding season of raptors and migratory birds. This is defined as occurring between February 1 and August 31. The Director of Planning and Land Use may waive this condition, through written concurrence from the US Fish and Wildlife Service and the California Department of Fish and Game, that no nesting migratory birds or raptors are present in the vicinity of the brushing, clearing or grading.

SECTION 9: CUMULATIVE IMPACTS

A project list for the biological resources cumulative impact analysis has been compiled in accordance with the County of San Diego Guidelines for Determining Significance for Biological Resources. The list has been developed in consultation with County DPLU staff for projects in the region, and through research of relevant past, present, and future projects captured within a two-mile radius of the proposed project, as established by the County DPLU. In addition to project location, the cumulative project list was selected based on comparability and relevancy to the proposed project in terms of type of project, project description, and typicality and extent of existing resources and project-specific impacts. The cumulative projects study area was selected to include similarities in land use, habitat types, regional distribution of species, general hydrology, and physical attributes of the land such as topography and soils. In addition to the proposed project, the cumulative project list includes the following: Minor Use Permit 03-012 "#16 Swycaffer Corner – AT&T", Minor Use Permit 00-146 "Intermountain Volunteer Fire Department", Minor Use Permit 00-146-01 "Intermountain Volunteer Fire Department", Minor Use Permit 01-022 "American Tower Management Inc. ZAP", Major Use Permit 04-039 "Nextel CA6403 Ballena Valley", Minor Use Permit 87-034-01 "Cohn, Minor Use Permit Modification, ZAP 87-034 W1", Major Use Permit 03-123 "#20085B Little Page / AT&T", Major Use Permit 06-091 "Ballena Wales Verizon Wireless", Major Use Permit 07-002 "Sprint Nextel CA8968D Witch Creek", and Tentative Map 5008 "Ramona Ridge Estates". Project information that has been released to date for these ten projects is available for review at the County DPLU offices.

Of the total cumulative projects, three projects were determined to have the potential to result in impacts to biological resources and will be considered in the cumulative impact analysis: Minor Use Permit 00-146 "Intermountain Volunteer Fire Department", Tentative Map 5008 "Ramona Ridge Estates", and the proposed project. The remaining projects within the cumulative project list had been granted notices of exemption upon which the need for biological resources studies had been waived during project review, or the projects were withdrawn from application or activity status terminated prior to the submittal of any biological resources documentation. The following provides a brief discussion of the relevant project-level impacts associated with each project considered for the cumulative impact analysis.

Minor Use Permit 00-146 has been constructed, along with permit amendments (Minor Use Permit 00-146-01), and resulted in the loss of 0.66 acre of Diegan coastal sage scrub and 0.94 acre of non-native grassland, of which were mitigated in-full through the Habitat Loss Permit process and offsite acquisition of habitat at the Old Castle Mitigation Bank or Singing Hills Mitigation Bank. Similar to the design approach of the proposed project, Minor Use Permit 00-146 also implemented avoidance and minimization measures for oak woodland habitat, including a 25-foot setback from a single Englemann oak tree on the property. No mitigation measures were required for potential impacts to the oak woodland habitat beyond the 25-foot setback. The avoidance of oak woodland habitat as a result of Minor Use Permit represents a contribution toward the preservation and continued persistence of this habitat, and is a cumulatively considerable affect when accounted for along with the proposed project.

Tentative Map 5008 continues to be in progress and has not been approved to date. According to the most recent available correspondence dated November 22, 2004, the need for additional environmental documentation had been identified for the project, including additional biological resources studies to address wetlands, kangaroo rat (*Dipodomys* sp.) issues, and mitigation banking. Based on existing documentation, Tentative Map 5008 would result in the loss of 28.23 acres of Diegan coastal sage scrub, 0.36 acres of oak woodland, and 57.73 acres of non-native grassland. The project proposed to offset the loss of this habitat through the Habitat Loss

Permit process and the establishment of an open space easement on-site that would preserve 41.48 acres of Diegan coastal sage scrub, 13.1 acres of oak woodland, 2.2 acres of riparian habitat, and 23.03 acres of non-native grassland. The permanent loss of 0.36 acre of oak woodland would represent a measurable loss of this habitat, and the preservation of 13.1 acres within an open space easement would represent a contribution toward the preservation and continued persistence of this habitat. These affects to oak woodland are cumulatively considerable when accounted for along with the proposed project.

The proposed project will result in a total of 0.07 acre of impacts to oak woodland habitat and 0.02 acre of impacts to disturbed habitat. As discussed for project-level impacts above, these impacts could result in the temporary displacement of non-listed special-status wildlife species, loss of foraging habitat, and indirect noise-related impacts to nesting birds during the breeding season. The entirety of the 0.07 acre of impacts to oak woodland habitat will occur outside of any oak tree canopies and will not result in the loss or removal of any oak trees onsite. Project impacts to this community will result from installation of the 0.04-acre equipment area and 0.03 acre of associated trenching that occurs within the area mapped as oak woodland. Although impacts associated with trenching will not result in the loss or mortality of an oak tree, any trenching that occurs within an area mapped as oak woodland requires compensatory habitat-based mitigation. The remaining 0.02 acre of utility line trenching will occur entirely within disturbed habitat and is not considered a significant impact to adjacent oak woodlands and therefore will not require compensatory habitat-based mitigation. Accounting for the loss of this 0.07 acre, the proposed project would avoid impacts to a total of 1.03 acre of oak woodland within the survey area. Despite the temporary nature of impacts and the project's avoidance, impacts to 0.07 acre of oak woodland represents a measurable loss to this habitat, and is a cumulatively considerable affect when accounted for along with the total cumulative projects.

The total cumulative impacts to oak woodland could be considered significant due to the sensitivity of this habitat as a natural community that provides habitat for common and sensitive species as well as providing other resource benefits within the cumulative study area and general region. The total cumulative projects would result in impacts to approximately 0.43 acre of oak woodland habitat (0.36 acre loss from Tentative Map 5008, and 0.07 acre of loss from the proposed project) and avoidance and/or preservation of approximately 14.14 acres of oak woodland habitat (0.01 acre of avoidance for Minor Use Permit 00-146, 13.1 acres of avoidance and preservation for Tentative Map 5008, and 1.03 acres of avoidance for the proposed project). The proposed project's total contribution to the cumulative loss of oak woodland is 16.3 percent (0.07 acre of the total 0.43 acre). This is cumulatively considerable when compared against the total cumulative impact, however, when compared against the avoidance and/or preservation of this habitat resulting from the cumulative projects, in addition to the amount of existing undeveloped oak woodlands within the cumulative study area, the project's contribution to the cumulative impact on oak woodlands is considered very low. Oak woodland habitat is prevalent in the immediate vicinity of the survey area, with contiguous closed canopy stands occupying Wash Hollow Creek and an unnamed tributary to the east, as well as broken open canopy stands occupying undeveloped land to the north toward the Ballena Valley, and west toward Creek Hollow. Although not as prevalent in the region as other habitat types, large intact stands of oak woodlands remain undeveloped and preserved within Cleveland National Forest lands further to the south and east of the survey area, in addition to open land to the north, generally surrounding the Witch Creek, Santa Ysabel, and Mesa Grande areas. The total cumulative impacts to oak woodland are relatively isolated in location and minimal in size, and would not conflict with the future preservation of land as extensions or linkages to larger intact stands in the local vicinity or region, or create any significant physical constraints in the future assembly of a preserve system that accounts for the preservation of large stands of oak woodland habitat.

Total cumulative impacts to oak woodland would be largely offset by the amount of preservation of this habitat resulting from past, present, and future projects within the cumulative projects area. In addition to avoidance and minimization measures such as those implemented for Minor Use Permit 00-146 and incorporated into the proposed project design, habitat-based mitigation for oak woodland has been required for project-specific impacts within the total cumulative projects, and this mitigation has contributed to the increased preservation of this habitat in the region by which cumulative impacts have been reduced. This is noticeable when considering such projects as Tentative Map 5008 in the proposed avoidance and preservation of an excess of 13 acres of this habitat within an open space easement, despite the potential loss of only 0.36 acre of this habitat. This is also noticeable when considering the proposed project. Pursuant to the habitat-based mitigation requirements for oak woodland, the proposed project would provide for the offsite acquisition of oak woodland habitat at a ratio of 3:1 resulting in approximately 0.21 acre preserved in perpetuity. This mitigation is adequate at the project level and would also be considered adequate to compensate for the project's contribution to the total cumulative impacts to oak woodland habitat. On-site or offsite habitat-based mitigation for the cumulative projects would contribute to existing preserves and may contribute to the future assembly of a regional preserve system, such as that which may be forthcoming within the Draft North County Segment or Draft East County Segment of the Multiple Species Conservation Program.

Therefore, when considered with the avoidance, minimization, and habitat-based mitigation measures resulting from the cumulative projects, the proposed project's avoidance of 1.03 acre of oak woodland within the survey area and offsite contribution of 0.21 acre of oak woodland habitat would reduce total cumulative impacts to this habitat and the species it may provide habitat for to less than significant.

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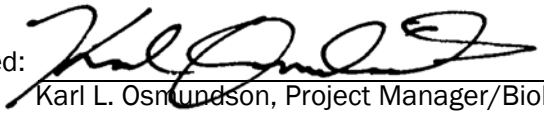
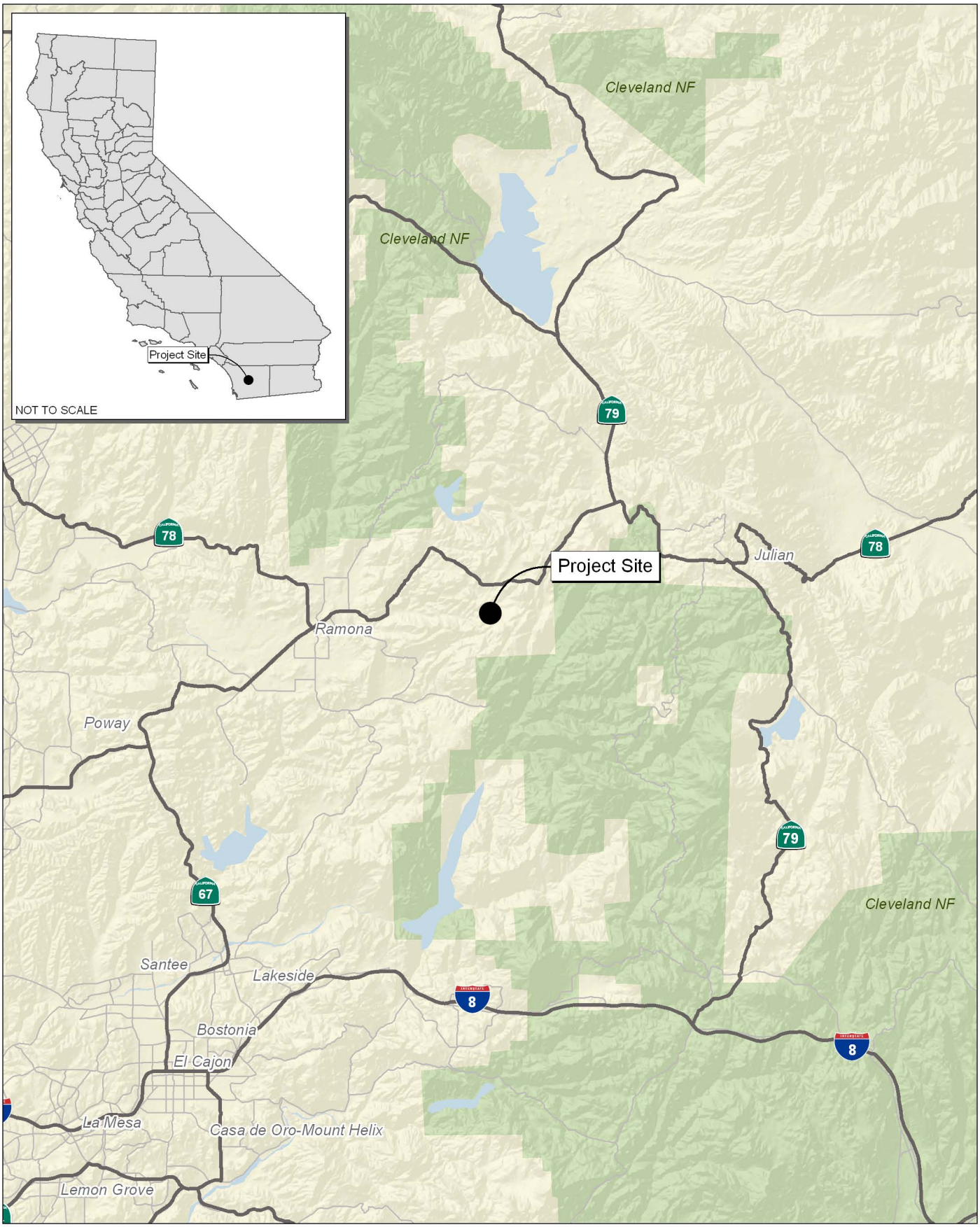
SECTION 11: PREPARER AND PERSONS/ORGANIZATIONS CONTACTED

This report was prepared in accordance with the County of San Diego report format and content requirements for biological resources by MBA Biologist Tommy Molioo. It has been reviewed and approved by MBA Biologist Karl Osmundson, a County-approved CEQA consultant. If you have any questions or concerns regarding this report, please contact Karl Osmundson at 714.508.4100.

As the responsible County-approved CEQA consultant for this report, I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented are true and correct in my professional opinion and in that of the firm that employs me:

Date: August 14, 2009 Signed: 

Karl L. Osmundson, Project Manager/Biologist
Michael Brandman Associates
Irvine, CA



Source: Census 2000 Data, The CaSIL, MBA GIS 2007.

NORTH

5 2.5 0 5

Miles

Michael Brandman Associates

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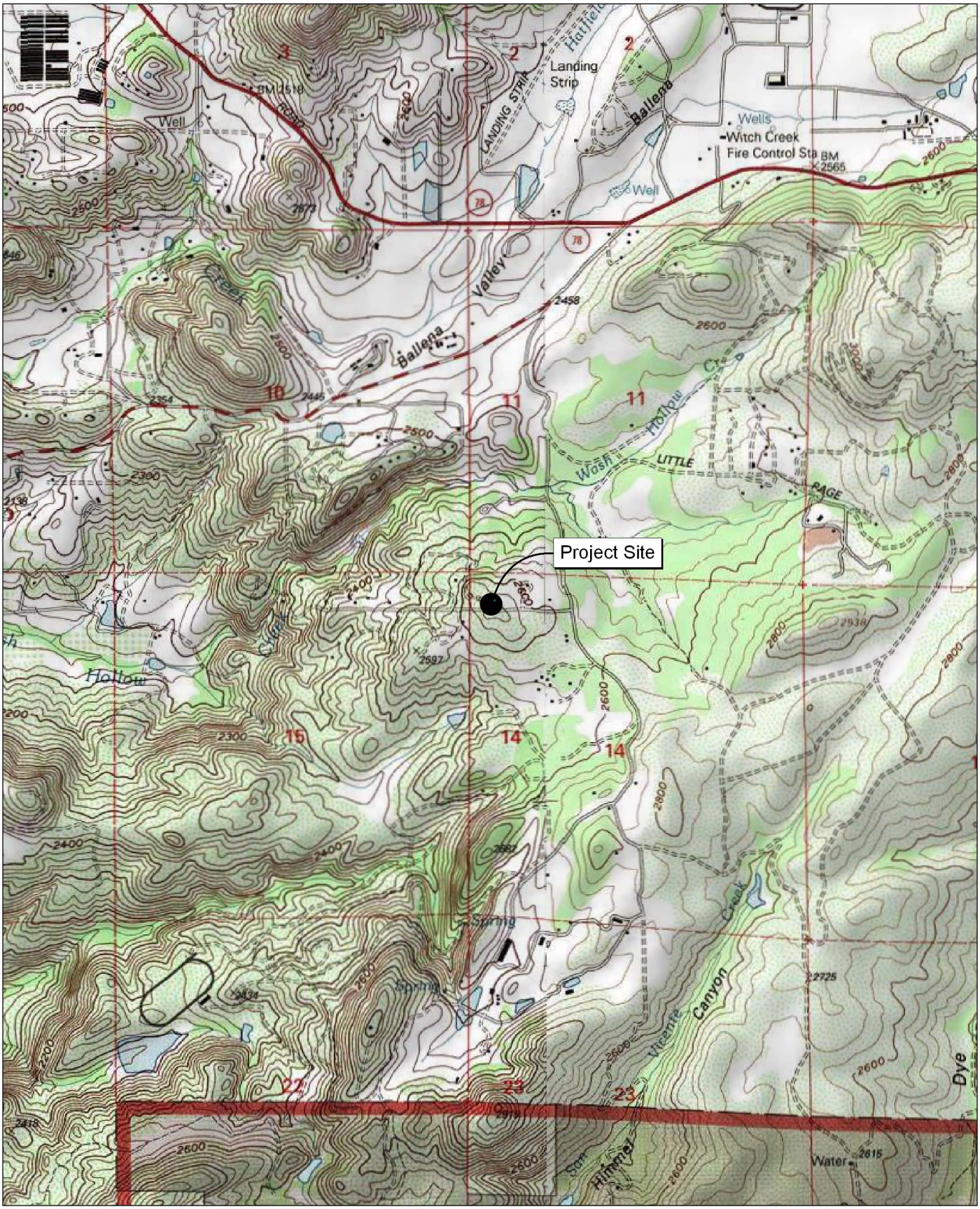
Exhibit 1
Regional Location Map

HORIZON TOWER • CA1017 - LITTLEPAGE LANE
BIOLOGICAL RESOURCES LETTER REPORT



Source: TOPO! USGS Ramona (2002) 7.5' DRG.

Exhibit 2
Local Vicinity Map
Topographic Base

NORTH

2,000 1,000 0 2,000 Feet

Michael Brandman Associates

29950901 • 02/2009 | 2_local_topo.mxd

Source: National Agriculture Imagery Program for San Diego (2005).

NORTH

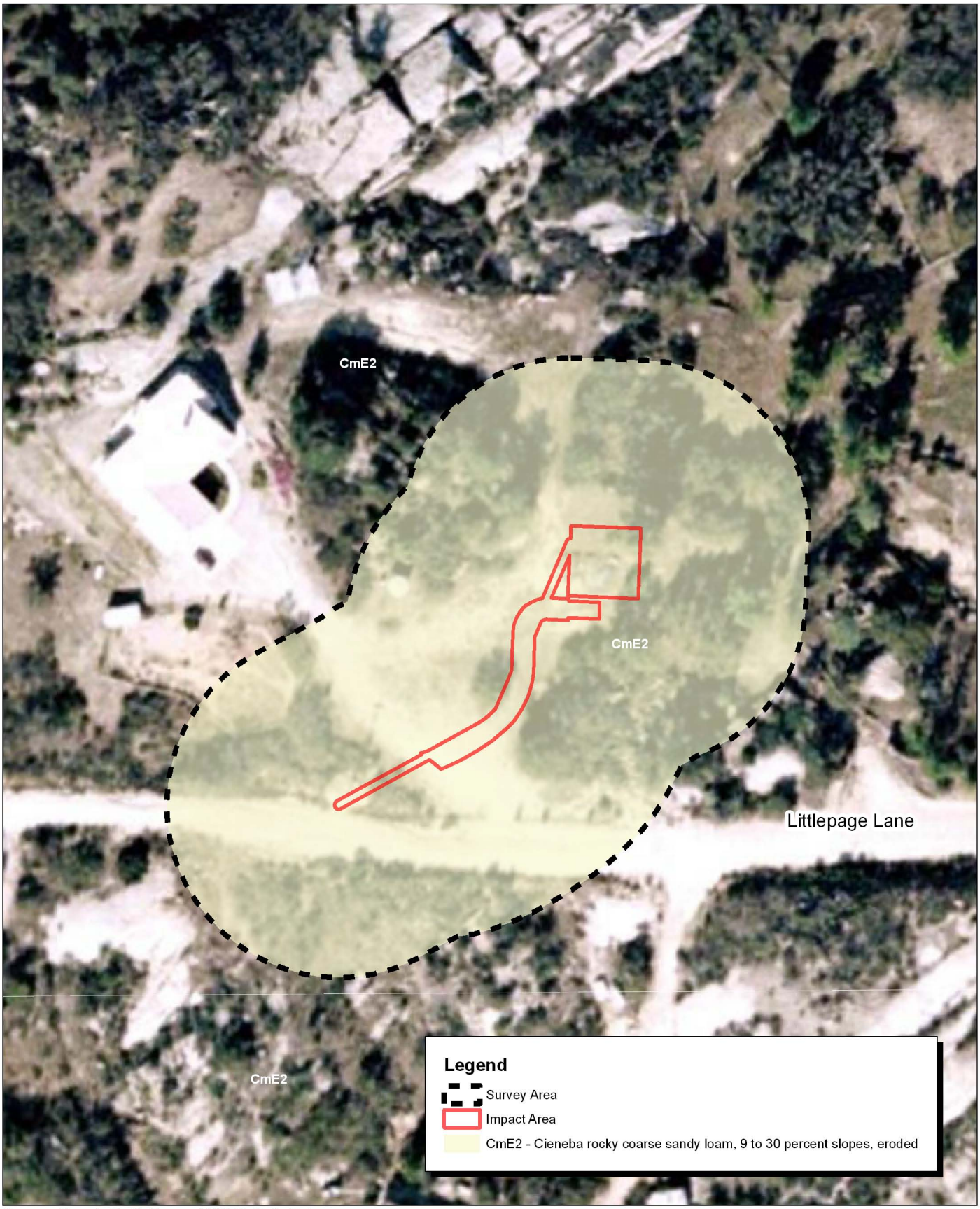
2,000 1,000 0 2,000

Feet

Michael Brandman Associates

29950901 • 02/2009 | 3_local_aerial.mxd

Exhibit 3
Local Vicinity Map
Aerial Base



Source: Google Earth Pro and USDA Soils Data.

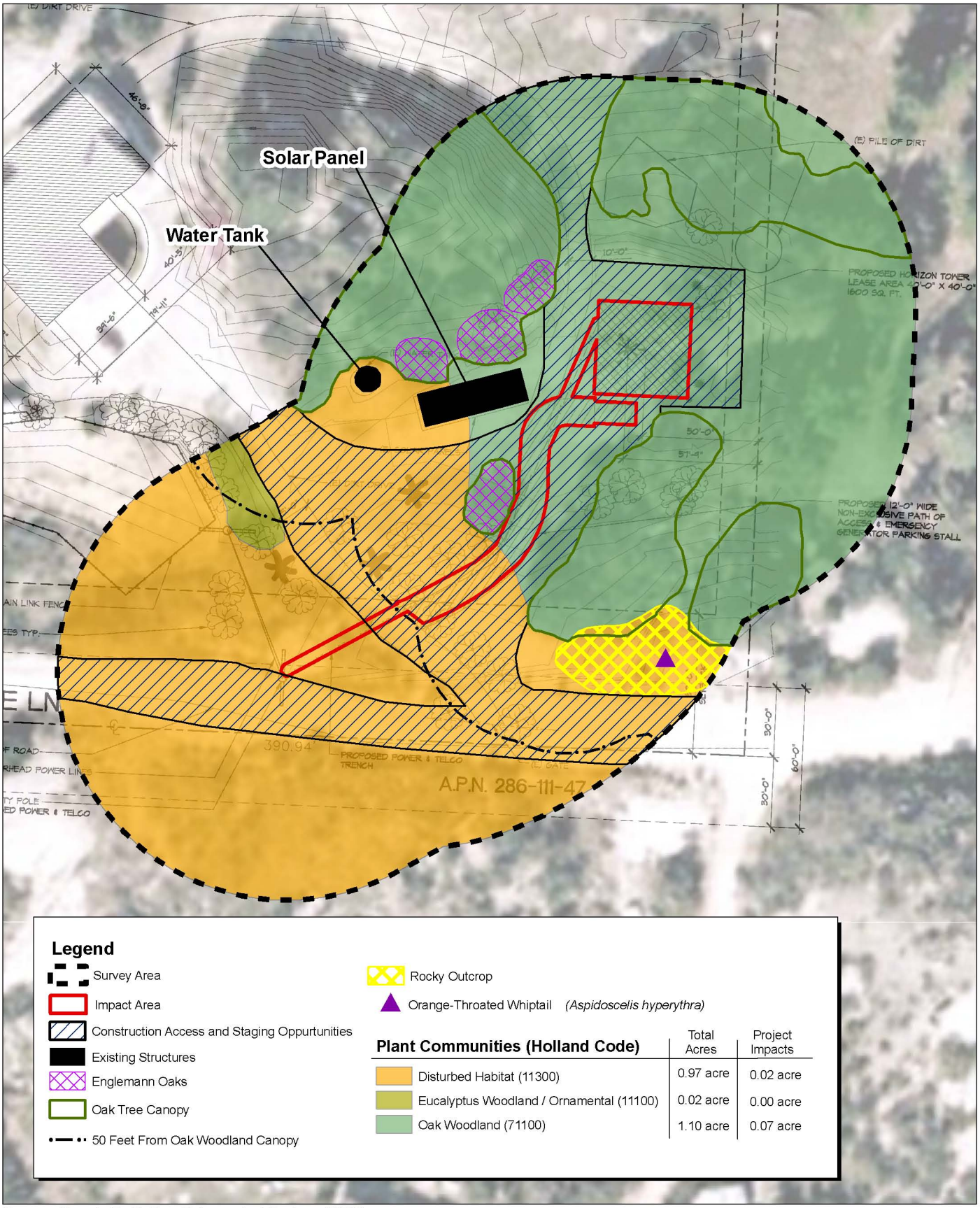
Michael Brandman Associates

NORTH

80 40 0 80 Feet

29950901 • 02/2009 | 4_soils.mxd

Exhibit 4
USDA Soils Map



Source: Google Earth Pro; Fulsang Architecture (2008).

Michael Brandman Associates

NORTH

60 30 0 60 Feet

Exhibit 5
Biological Resources Map

29950901 • 06/2009 | 5_biological_resources.mxd

HORIZON TOWER • CA1017 - LITTLEPAGE LANE
BIOLOGICAL RESOURCES LETTER REPORT

Attachment A: Floral and Faunal Compendia

FLORAL COMPENDIUM

Gymnosperms	
Pinaceae	**Pine Family**
C *Pinus* sp.*	pine
Angiosperms (Dicotyledons)	
Asteraceae	**Sunflower Family**
B *Artemisia californica*	California sagebrush
A *Encelia californica*	California brittlebush
A *Heterotheca grandiflora*	telegraph weed
Brassicaceae	**Mustard Family**
A *Hirshfeldia incana**	short-pod mustard
Fabacea	**Legume Family**
B *Lotus scoparius*	deerweed
Fagaceae	**Oak Family**
B *Quercus agrifolia*	coast live oak
B *Quercus engelmannii*	Engelmann oak
Geraniaceae	**Geranium Family**
A *Erodium sp.*	filaree
Hydrophyllaceae	**Waterleaf Family**
A *Phacelia distans*	common phacelia
Myrtaceae	**Myrtle Family**
C *Eucalyptus* sp.*	gum tree
Plantaginaceae	**Plantain Family**
A *Penstemon centranthifolius*	Scarlet buglar
Polygonaceae	**Buckwheat Family**
B *Eriogonum fasciculatum*	California buckwheat
Rosaceae	**Rose Family**
B *Adenostoma fasciculatum*	chamise
B *Prunus ilicifolia*	holly-leaf cherry
Angiosperms (Monocotyledons)	

Poaceae	Grass Family
A *Avena barbata**	slender oat
A *Bromus madritensis ssp. rubens**	red brome

Plant Community ID Legend

A – Disturbed Habitat

B – Oak Woodland

C – Eucalyptus Woodland/Ornamental

* Non-Native Species

FAUNAL COMPENDIUM

Invertebrates		
	Pieridae	**Whites, Sulphers, and Orangetips**
B	*Pieris rapae*	Cabage white
Reptiles		
	Teiidae	**Whiptails**
A	*Aspidoscelis hyperythra*	Orange-throated whiptail
Birds		
	Trochilidae	**Hummingbirds**
B	*Calypte anna*	Anna's hummingbird
	Corvidae	**Jays and Crows**
D	*Corvus brachyrhynchos*	American crow
	Emberizidae	**Emberizids**
D	*Pipilo crissalis*	California towhee
D	*Pipilo maculatus*	spotted towhee
	Fringillidae	**Finches**
A	*Carpodacus mexicanus*	house finch
Mammals		
	Sciuridae	**Squirrels**
A	*Spermophilus beecheyi*	California ground squirrel
	Canidae	**Wolves and Foxes**
A	*Canis familiaris*	domestic dog
	Geomyidae	**Pocket gophers**
A	*Thomomys bottae*	Botta's pocket gopher

Plant Community ID Legend

A – Disturbed Land
B – Oak Woodland
C – Eucalyptus Woodland/Ornamental
D – Other (Call Detection, In-Flight Observation, Sign)

Attachment B-1: Special-Status Plant Species Table

Special Status Plant Species Table

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
Acanthomintha ilicifolia	San Diego thornmint	FE	ST	1B.1	List A	Chaparral, coastal scrub, valley and foothill grassland vernal pools supported by clay soils. Elevation 10 - 960 m.	Annual herb	Apr – Jun	**Not Likely to Occur** The survey area is primarily characterized by disturbed habitat and does not support suitable habitat for this species. There is a record of this species occurring within the general vicinity of the site. However, no portions of the survey area are characterized by chaparral, CSS, or vernal pools supported by clay soils. The survey area is heavily disturbed and dominated by ruderal species and non-native grasses. This herb was not observed during the June 2008 habitat assessment survey.
Astragalus oocarpus	San Diego milkvetch	—	—	1B.1	List A	Cismontane chaparral edges at the periphery of meadows on crouch coarse sandy loams, typically with mild soil disturbance. Known Elevation Limits: 305 - 1524	Perennial herb	May – Aug	**Not Likely to Occur** The survey area is primarily characterized by disturbed habitat and does not support suitable habitat for this species. There is a record of this species occurring within the general vicinity of the site. However, no portions of the survey area are located or characterized by cismontane chaparral edges at the periphery of meadows. The

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
									survey area does not support the preferred soil for this species. This herb was not observed during the June 2008 habitat assessment survey.
Baccharis vanessae	Encinitas baccharis	FE	ST	1B.1	List A	Relatively low-growing chaparral dominated by *Adenostoma fasciculatum*. On Corralitos loamy sand, Cieneba rocky coarse sandy loam, sometimes associated with large granitic boulders. Known Elevation Limits: 60 – 720 m	Deciduous shrub	Aug – Nov	**Not likely to Occur** The survey area is primarily characterized by disturbed habitat and does not support suitable habitat for this species. No portions of the survey area are currently characterized by chamise dominated chaparral. The survey area does contain Cieneba rocky coarse sandy loam, however the soil is compacted and has been subject to various previous disturbances. The survey area is above the elevation limit for this species. No *Baccharis* shrubs were observed during the June 2008 habitat assessment survey.
Brodiaea orcuttii	Orcutt's brodiaea	—	—	1B.1	List A	Closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools in mesic environments supported	Bulbiferous herb	May – Jul	**Not Likely to Occur** The survey area is primarily characterized by disturbed habitat and does not support suitable habitat for this species. There is a record of this species occurring within

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
						by clay and sometimes serpentine soils. Known Elevation Limits: 30 - 1692 m.			the general vicinity of the site. However, no portions of the survey area are characterized by forests, chaparral, cismontane woodlands, or vernal pools. The survey area does not contain clay or serpentine soils. This herb was not observed during the June 2008 habitat assessment survey.
Ceanothus cyaneus	Lakeside ceanothus	—	—	1B.2	List A	Typically occurs in a tall, mesic, dense, almost impenetrable chaparral with a mix of chamise and other shrubs. Known to occur on Acid Igneous rock land and Cieneba very rocky coarse sandy loam. Known Elevation Limits:235 – 755 m	Evergreen shrub	Apr – Jun	**Not Likely to Occur** The survey area is primarily characterized by disturbed habitat and does not support suitable habitat for this species. No portions of the project site are characterized by tall, mesic, dense chaparral. The site supports the known associated soils series for this species, however the site is heavily disturbed, likel y too xeric, and above the known elevation limits for this species. This evergreen shrub was not observed during the June 2008 habitat assessment survey.
Chorizanthe leptotheca	Peninsula spineflower	—	—	4.2	List D	Xeric openings in chamise chaparral. Also within coastal sage scrub and lower	Annual herb	May – Aug	**Not Likely to Occur** The survey area is primarily characterized by disturbed

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
						montane coniferous forest. Granitic soils and substrates associated with alluvial fans in inland areas. Known Elevation Limits: 300 – 1,900 m			habitat and does not support suitable habitat for this species. No portions of the survey area contain chamise chaparral or coastal sage scrub. The survey area does not support substrates associated with alluvial fans. This annual herb was not observed during the June 2008 habitat assessment survey.
Clarkia delicate	Campo clarkia	—	—	1B.2	List A	Occurs in the periphery of oak woodlands and cismontane chaparral haunts. Known to occur in Bancas stony loam. Locales where observed were partially shaded by tree canopy or large shrubs, and typically were vernally mesic situations with substantial peripheral annual and herbaceous spring growth. Known Elevation Limits: 235 – 1000 m	Annual herb	Apr – Jun	**Not Likely to Occur.** The survey area is primarily characterized by disturbed habitat and does not support suitable habitat for this species. No portions of the survey area are characterized by cismontane chaparral nor a vernally mesic site. The impact area does occur on the periphery of a fragmented oak woodland; however, the site does not support the associated soil series for this species and is likely too xeric. This annual herb was not observed during the June 2008 habitat assessment survey.
Gilia caruifolia	Caraway leaved gilia	—	—	4.3	List D	Known to occur in lower montane coniferous forest and	Annual herb	May – Aug	**Not Likely to Occur** The survey area is primarily

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
						high desert chaparral associated with Tollhouse rocky coarse sandy loam and Holland stony fine sandy loam. Usually found in openings with mild disturbance. Known Elevation Limits: 1400 – 2300 m			characterized by disturbed habitat and does not support suitable habitat for this species. No portions of the survey area are characterized by lower montane coniferous forest or high desert chaparral. The survey area does not support the associated soil series for this species. The project site is below the elevation limit for this species. This annual herb was not observed during the June 2008 habitat assessment survey.
Harpagonella palmeri	Palmer's grappling hook	—	—	4.2	List B	Chaparral, coastal scrub, and valley and foothill grassland. lower montane coniferous forest. Open grassy areas within shrublands on clay soils. Known Elevation Limits: 20 – 955 m	Annual herb	Mar – May	**Not Likely to Occur** The survey area is primarily characterized by disturbed habitat. This species preferred plant community and associated soils do not occur within the survey area. No portions of the survey area are characterized by open grassy areas within shrublands. The area is not mapped as containing clay soils.
Horkelia truncata	Ramona horkelia	—	—	4.2	List D	Occurs within low-growing, moderately dense chamise chaparral associated with Cieneba very rocky coarse sandy loam.	Annual herb	Mar – Jul	**Not Likely to Occur** The survey area is primarily characterized by disturbed habitat supported by disturbed soils. There is a record of this

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
						Known Elevation Limits: 400 – 1300 m			species occurring within the general vicinity of the survey area, and the area does support the associated soil series for this species; however, the observed soils within the survey area are disturbed as a result of clearing and compaction, and dumping of debris, and no portions of the survey area contain low-growing, moderately dense chamise chaparral. This annual herb was not observed during the June 2008 habitat assessment survey.
Lepechinia cardiophylla	Heart leaved pitcher sage	—	—	1B.2	List A	Occurs in chaparral and cismontane woodland associated with Friant rocky fine sandy loams. Chaparrals that support this species are relatively dense and mature. May also occur low-growing xeric chamise chaparral on volcanic derived soils. Known Elevation Limits: 520 – 1370 m	Shrub	Apr – Jul	**Not Likely to Occur** The survey area does not support suitable habitat for this species. No portions of the survey area are currently characterized by chaparral, and no portions contain volcanic derived soils or friant rocky fine sandy loams. Marginal cismontane oak woodland occurs within the survey area; however it is characterized by a sparse understory of disturbed land and is supported by inappropriate soils. This shrub was not observed during the

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
									June 2008 habitat assessment survey.
Machaeranthera juncea	Rush like bristle bush	—	—	4.3	List D	Known to occur in a xeric, low-growing chamise chaparral or Diegan sage scrub. Usually grows in exposed locales with rocky substrate with little understory growth. Known Elevation Limits: 240 – 1000	Perennial herb	Jun – Jan	**Not Likely to Occur** The survey area does not support suitable habitat for this species. No portions of the survey area are currently characterized by xeric, low-growing chaparral or Diegan sage scrub. Marginal disturbed habitat supported by exposed rocky substrates occurs in limited portions of the survey area; however these areas are not contained within the impact area. This herb was not observed during the June 2008 habitat assessment survey.
Monardella hypoleuca lanata	Felt leaved rock mint	—	—	1B.2	List A	Usually occurs in the understory of chaparral, beneath mature stands of chamise in xeric situations. Known to occur with *Pedicularis densiflora*. Associated soils include San Miguel-Exchequer rocky silt loam and Acid Igneous rock lands. Known Elevation Limits: 300 – 1575 m	Rhizomatous herb	Jun – Aug	**Not Likely to Occur** The survey area does not support the known vegetation associations or soils for this species. This herb was not observed during the June 2008 habitat assessment survey.

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
Navarretia fossalis	Spreading navarretia	—	ST	1B.1	List A	Chenopod scrub, marshes and swamps (assorted shallow freshwater), playas, vernal pools, and vernal swales. Known Elevation Limits:30 - 1300 m.	Annual herb	Apr – Jun	**Not Likely to Occur** The survey area does not contain suitable habitat to support this species. No portions of the survey area are characterized by marshes, swamps, vernal pools or vernal swales. No freshwater pools occur onsite.
Nolina cismontana	Chapparal beargrass	—	—	1B.2	List A	Coastal sage scrub and chaparral with xeric conditions supported by sandstone or gabbroic soils. Known Elevation Limits:140 – 1,275 meters	Evergreen shrub	May – Jul	**Not Likely to Occur** The survey area does not contain suitable habitat to support this species. No portions of the survey area are currently characterized by coastal sage scrub or chaparral. The survey area does not support sandstone or gabbroic soils. This evergreen shrub was not observed during the June 2008 habitat assessment survey.
Piperia leptopetala	Narrow-petaled rein orchid	—	—	4.3	List D	Known to occur within cismontane woodlands, lower and upper montane coniferous forests. Known Elevation Limits: 380 – 2225 m	Perennial herb	May – Jul	**Not Likely to Occur** The survey area does not support suitable habitat for this species. No portions of the survey area are currently characterized by lower or upper montane coniferous forest. Marginal cismontane oak woodland occurs within the survey area; however it is

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
									characterized by a sparse understory of disturbed land and is supported by disturbed soils. This shrub was not observed during the June 2008 habitat assessment survey.
Polygala cornuta fishiae	Fish's milkwort	—	—	4.3	List D	Typically occurs in chaparral and cismontane woodland with Coast Live Oaks. Occurs with chamise chaparral on very xeric sites associated with Las Posas fine sandy loam and Blasingame stony loam. Can conversely occur on mesic, north-facing slopes beneath tall tree canopy in heavy shade associated with Cieneba very rocky coarse sandy loam. Also known to be associated with wetlands. Known Elevation Limits: 100 – 1100 m	Deciduous shrub	May – Aug	**Not Likely to Occur** The survey area does not support suitable habitat for this species. No portions of the survey area are currently characterized by chaparral, and no portions contain Las Posas fine sandy loam and Blasingame stony loam. No wetlands occur on or in the vicinity of the survey area. Marginal cismontane oak woodland occurs within the survey area; however it is characterized by a sparse understory of disturbed land. This shrub was not observed during the June 2008 habitat assessment survey.
Quercus engelmannii	Engelmann oak	—	—	4.2	List D	Chaparral, cismontane woodland, riparian woodland, savannah, valley and foothill grassland.	Deciduous tree	Mar – Jun	**Species Present** Several Engelmann oak trees were observed in portions of the oak woodland community that occurs within the survey

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
						Known Elevation Limits: 120 – 1300 m.			area. No Engelmann oaks occur within the proposed impact area. A single mature Engelmann oak occurs adjacent and north of the proposed trench route and dirt access road, and additional Engelmann oaks occur within 50 feet of portions of the proposed equipment and antenna location. Due to the relatively small size of the proposed impact area and limited extent of ground disturbance and excavation, no oaks are anticipated to be impacted.
Satureja chandleri	San Miguel Savory	—	—	1B.2	List A	Coastal scrub, chaparral, riparian woodland, cismontane woodland, oak woodland, and valley and foothill grassland supported by rocky, gabbroic or metavolcanic soils. Known Elevation Limits: 120 – 1075 m	Shrub	Mar – Jul	**Low Potential to Occur.** Marginal cismontane oak woodland occurs within the survey area; however it is characterized by a sparse understory of disturbed land and disturbed soils that are likely not appropriate for this species. This species is not likely to occur within the impact area and was not observed within any portion of the survey area during the June 2008 habitat assessment survey.
Senecio (Packera) ganderi	Gander's butterweed	—	—	1B.2	List A	Chaparral understory, often at burn sites,	Perennial herb	Apr - Jun	**Low Potential to Occur.** The entire survey area is a

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				
						supported by stony fine sandy loam of the Las Posas series and gabbroic outcrops. Known Elevation Limits: 400 – 1200 m			post-burn site, and a limited portion contains suitable rock outcrop substrate. No portions of the proposed impact area contain suitable chaparral or substrate for this species. This species was not observed within any portion of the survey area during the June 2008 habitat assessment survey.
Sibaropsis hammittii	Hammitt's claycress	—	—	1B.2	List A	Valley and foothill grasslands and chaparral openings supported by clay soils. Known Elevation Limits: 720 – 1065 m	Annual herb	Mar – Apr	**Not Likely to Occur** The survey area does not contain suitable habitat to support this species. The survey area does not support clay soils. No portions of the survey area are currently characterized by grasslands or chaparral openings.
Tetracoccus dioicus	Parry's tetracoccus	—	—	1B.2	List A	Chaparral, often chamise-dominated, and coastal sage scrub, preferred soils are of the Las Posas series. Known Elevation Limits: 165 – 1,000 meters	Deciduous shrub	Apr – May	**Not Likely to Occur** The survey area does not contain suitable habitat to support this species. No portions of the survey area are currently characterized by chamise chaparral or coastal sage scrub. The survey area does not support Las Posas soils. This shrub was not observed during the June 2008 habitat assessment.

U.S. Fish and Wildlife Service California Department of Fish and Game California Native Plant Society

Species		Status				Preferred Habitat	Life Form	Blooming Period	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	USFWS	CDFG	CNPS	San Diego County				

FE Federal Endangered
FT Federal Threatened
PE Proposed Endangered
PT Proposed Threatened
FC Federal Candidate
FSC Species of Concern*
*No longer recognized as a federal designation.

CE California Endangered
CT California Threatened
CR California Rare

1A Plants presumed extinct in California.
1B Plants rare, threatened, or endangered in California and elsewhere.
2 Plants rare, threatened, or endangered in California, but more common elsewhere.
3 Plants in need of more information.
4 Plants of limited distribution.
** No Longer Recognized as Sensitive by CNPS

San Diego County Sensitive:
San Diego County List A
San Diego County List B
San Diego County List C
San Diego County List D

Not Likely to Occur – There are no present or historical records of the species occurring on or in the immediate vicinity, (within 3 miles) of the survey area and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the survey area.

Low Potential to Occur – There is a historical record of the species in the vicinity of the survey area and potentially suitable habitat on the survey area, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The survey area is above or below the recognized elevation limits for this species.

Moderate Potential to Occur – The diagnostic habitats associated with the species occur on or in the immediate vicinity of the survey area, but there is not a recorded occurrence of the species within the immediate vicinity (within 3 miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.

High Potential to Occur – There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the survey area (within 3 miles).

Species Present – The species was observed on the survey area at the time of the survey or during a previous biological survey.

Attachment B-2: Special-Status Wildlife Species Table

Special Status Wildlife Species Table

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Insects							
Danaus plexippus	Monarch butterfly	—	—	Group 2	—	A predominantly open county, frost intolerant species whose range of breeding habitats is greatly dependent upon the presence of asclepiad flora (milkweeds). Requires dense tree cover for overwintering. Also associated with Eucalyptus trees.	**Not Likely to Occur.** No suitable habitat for this species occurs within the survey area. No milkweeds, its host species, occur within the survey area, and the oak trees that occur on and in the vicinity of the survey area provide poor over wintering habitat for this species.
Euphydras editha quino	Quino checkerspot butterfly	FE	—	Group 1	—	Known to occur in clay soil meadows, native and non-native grasslands, coastal and semi-desert scrubs, and chaparrals with canopy openings supported by clay or cryptogamic crusts. As a vital habitat component, this species requires the presence of host plants in the families Plantaginaceae and Scrophulariaceae; most commonly dwarf plantain (*Plantago erecta*) and purple owl's-clover (*Castilleja exserta*).	**Not Likely to Occur.** None of this species host plants were observed within the survey area. This species is not likely to use the survey area during its larval stage due to lack of host plants. The survey area provides limited foraging opportunities and nectar sources. This species is not likely to forage within the impact area during the flight season.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Lycaena hermes	Hermes copper butterfly	—	—	Group 1	—	Found in southern mixed chaparral and coastal sage scrub at western edge of Laguna Mountains.	**Not Likely to Occur** No suitable habitat for this species occurs within the survey area. The survey area occurs near the community of Ramona and does not occur on the edge of the Laguna Mountains. No portions of the survey area are currently characterized by mixed chaparral or coastal sage scrub.
Reptiles and Amphibians							
Charina trivirgata roseofusca	Coast rosy boa	—	—	Group 2	—	In coastal areas, this species occurs in rocky chaparral-covered hillsides and canyons, and scrub flats with good cover in deserts. Absent from grasslands but may occur in oak woodlands if it interdigitates with scrub or chaparral. Known to occur in San Diego County within CSS, chaparral, riparian, and mixed habitats. Prefers moderate to dense vegetative cover with rocks/rocky outcrops.	**Low Potential to Occur** The survey area is primarily characterized by disturbed land that lacks an abundance of suitable vegetative cover and other refuge. Marginal oak woodland understory and rock outcrops characterize a limited portion of the survey area that could be used for foraging and/or basking habitat by this and other reptile species.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Cnemidophorus hyperythrus	Orange-throated whiptail	—	SSC	Group 2	—	Coastal scrub, chaparral, and valley and foothill hardwood habitats. Prefers washes and sandy areas with patches of brush and rocks. Perennial plants required to support its primary prey termites.	**Species Present** This species was observed basking on the periphery of the survey area during the habitat assessment. This species may occasionally forage within the proposed impact area; however, the area is relatively void of resources and limited refuge opportunities are available.
Cnemidophorus tigris multiscutatus	Coastal western whiptail	—	—	Group 2	—	Found in deserts and semiarid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Substrate may be firm soil, sandy, or rocky at surface.	**Low Potential to Occur** This species may occasionally forage within the proposed impact area; however, the area is relatively void of resources and limited refuge opportunities are available.
Coleonyx variegatus abbottii	San Diego banded gecko	—	—	Group 1	—	Typically prefers rocky areas in coastal sage scrub and chaparral, found in the interior southern coastal region, generally west of the Peninsular ranges and south of the Transverse ranges, and north up the coast to Ventura County.	**Low Potential to Occur** No portions of the survey area are currently characterized by CSS or chaparral. Marginal rock outcrops occur within the survey area for this species. This species may occasionally forage within the proposed impact area; however, the impact area is relatively void of resources and lacks suitable refuge opportunities for this species.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Crotalus ruber ruber	Northern red diamond rattlesnake	—	SSC	Group 2	—	Occurs from coastal San Diego County to the eastern slopes of the mountains and in desert habitats. Occurs from sea level to 900 meters in chaparral, woodland, and arid desert habitats in rocky areas and dense vegetation.	**Low Potential to Occur** This species may occasionally forage within the proposed impact area; however, the area is relatively void of resources and limited refuge opportunities are available.
Diadophis punctatus similis	San Diego ringneck snake	—	—	Group 2	—	Wet meadows and moist rocky hillsides, gardens, farmlands, grassland, chaparral, mixed coniferous forests, and woodlands.	**Not Likely to Occur.** No suitable habitat occurs on or in the immediate vicinity of the survey area for this species. The survey area generally occurs within a slightly sloping dry upland area that is characterized by an open canopy of sparse vegetation. Limited refuge opportunities occur on or in the immediate vicinity of the survey area for this species. The area is likely too xeric to support this species.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Ensatina eschscholtzii klauberi	Large-blotched salamander	—	SSC	Group 1	—	Known to occur in coastal dunes, CSS, chaparral, oak woodland, and conifer forests, within shady canopy with extensive leaf litter, typically on north-facing slopes or woodlands. Will seek refuge under rocks, logs, leaf litter, and boards.	**Low Potential to Occur.** The survey area generally occurs within a slightly sloping dry upland area that is characterized by an open canopy of sparse vegetation. Marginal oak woodlands occur within limited portions of the survey area; however, the understory of the woodland is mostly bare and contains little or no leaf litter and other refuge opportunities. The survey area contains limited rock outcrops that could be used by this species. This species may occasionally forage within the proposed impact area; however, the area is relatively void of resources and limited refuge opportunities are available.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Phrynosoma coronatum blainvillei	San Diego horned lizard	—	SSC	Group 2	—	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions and prefers friable, rocky, or shallow sandy soils.	**Low Potential to Occur.** The survey area contains marginal substrates for this species and likely supports an adequate prey base (ants) due to the existing residence. Limited refuge opportunities are available however due to the compacted rocky soils and lack of vegetative cover. This species has a low potential to forage within the proposed impact area.
Salvadora hexalepis virgultea	Coast patch-nosed snake	—	SSC	Group 2	—	Occupies desert scrub, coastal chaparral, washes, sandy flats, and rocky areas, making use of whatever cover is available.	**Low Potential to Occur** This species may occasionally forage within the proposed impact area; however, the area is relatively void of resources and limited refuge opportunities are available.
Scaphiopus hammondii	Western spadefoot toad	—	SSC	Group 2	—	Found in coastal sage scrub, chaparral, and grassland habitats, but most common in grasslands with vernal pools or mixed grassland/CSS habitats.	**Not Likely to Occur.** This species preferred habitat does not occur within the survey area.
Avian							

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Accipiter cooperi	Cooper's hawk	—	—	Group 1	—	(Nesting) Open, uninterrupted, or marginal type woodlands. Nest sites in riparian growths of deciduous trees, live oaks. Also other various forest habitats that are near water. Dense woodlands and forests are primary foraging habitat for this accipiter.	**Low Potential to Occur.** Marginal nesting habitat and foraging habitat occur within the survey area for this species. Existing anthropogenic disturbances associated with the residence (human activity and domestic animals) would likely deter this species from nesting in the area.
Accipiter striatus	Sharp-shinned hawk	—	SSC	Group 1	—	(Nesting and Wintering) Ponderosa pine, black oak, riparian deciduous, mixed conifer and Jeffrey pine habitats. Prefers riparian areas.	**Not Likely to Occur.** The survey area is not located within this species nesting range. Marginal wintering habitat occurs on and in the vicinity of the site; however this species is unlikely to occur in the area.
Aimophila ruficeps canescens	Rufous-crowned sparrow	—	SSC	Group 1	—	Resident in southern California coastal sage scrub and sparse mixed chaparral.	**Not Likely to Occur.** No portions of the survey area are currently characterized by coastal sage scrub or sparse mixed chaparral. This species is unlikely to occur in the area.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Amphispiza belli belli	Bell's sage sparrow	—	SSC	Group 1	—	Vertical structure, habitat patchiness, and vegetation density may be more important in habitat selection by the species than the specific shrub species, but is closely associated with sagebrush. Common, but localized resident breeder in dry chaparral and coastal sage scrub along the coastal lowlands, inland valley, and in the lower foothills of local mountains. The preference for chamise chaparral appears to occur only in the more northern parts of its range.	**Not Likely to Occur.** No portions of the survey area are currently characterized by this species preferred habitat. This species is unlikely to occur in the area.
Aquila chrysaetos	Golden eagle	—	FP	Group 1	—	(Nesting and Wintering) Rolling foothills and mountain areas, juniper-sage flats, and deserts. Primarily associated with cliff-walled canyons and large trees in open habitats for nesting. Shrub-steppe and native grassland communities provide important foraging habitat. Also carrion.	**Not Likely to Occur.** No suitable nesting habitat for this species occurs within the survey area due to lack of suitable cliff habitat and large trees in open areas. Marginally suitable foraging opportunities occurs within limited portions of the survey area; however, existing anthropogenic disturbances would likely deter this species from utilizing the area.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Buteo lineatus	Red-shouldered hawk	—	—	Group 1	—	Red-shouldered hawks usually inhabit mature deciduous or mixed deciduous-conifer forests and swamps. They build their nests 6 to 15 meters (20 to 60 feet) above the ground in the branches of deciduous trees in wet woodland areas. They prefer to have dead trees nearby, where they can perch and enjoy an unobstructed view of the forest floor.	**Low Potential to Occur.** Marginal nesting habitat and foraging habitat occur within the survey area for this species. Existing anthropogenic disturbances would likely deter this species from nesting in the area.
Cathartes aura	Turkey vulture	—	—	Group 1	—	Found in open country, woodlands, and near farms.	**Not Likely to Occur.** No suitable foraging or nesting habitat occurs on or in the immediate vicinity of the survey area for this species.
Lanius ludovicianus	Loggerhead shrike	—	SSC	Group 1	—	Semi-open country within a wide range of scrub and grassland habitats with suitable perches. Utilizes fence lines for prey items and foraging.	**Low Potential to Occur.** Marginal nesting habitat and foraging habitat occur within the survey area for this species. Existing anthropogenic disturbances would likely deter this species from nesting in the area.
Sialia mexicana	Western bluebird	—	—	Group 2	—	Uncommon within woodlands, scrublands, farmlands, and orchards. Open oak woodlands in higher elevations. Nests tree cavities. Winters in desert regions often associated with mesquite-mistletoe groves.	**Low Potential to Occur.** Marginal nesting and foraging habitat occurs within the oak woodland located within and in the immediate vicinity of the survey area. This species has a low potential to forage within the impact area.
Mammals							

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Antrozous pallidus	Pallid bat	—	SSC	Group 2	—	Roosts in crevices, caves, mine shafts, bridges, buildings and tree hollows. Forages on insects in wide variety of habitats.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
Bassariscus astutus	Ringtail	—	—	Group 2	—	Chaparral, rocky ridges and cliffs near water.	**Not Likely to Occur.** This species may roam through the general vicinity of the survey area however the survey area itself does not provide the preferred habitat for this species. There are no rocky ridges or cliffs near water on or in the vicinity of the survey area. Existing anthropogenic disturbances would likely deter this species from utilizing the site.
Chaetodipus californicus femoralis	Dulzura California pocket mouse	—	SSC	Group 2	—	Variety of habitats including coastal scrub, chaparral, and grasslands in San Diego County. Associated with grass-chaparral edges.	**Not Likely to Occur.** No portions of the survey area are currently characterized by this species preferred habitat. This species is unlikely to occur in the area.
Corynorhinus townsendii	Townsend's big-eared bat	—	SSC	Group 2	—	Desert scrub and coniferous forest. Roosts in caves or abandoned mines, occasionally in buildings.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
Eumops perotis californicus	Greater western mastiff bat	—	SSC	Group 2	—	Rocky areas and cliff faces. Roosts in cliff crevices and buildings.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Felis concolor	Mountain lion	—	—	Group 2	—	Uses rocky areas, cliffs, and ledges that provide cover within open woodlands and chaparral, as well as riparian areas that provide protective habitat connections for movement between fragmented core habitat. Also, need both vertical and horizontal cover components, such as rocks and downed logs, to feel secure enough to bed.	**Not Likely to Occur.** This species may roam through the general vicinity of the survey area however the survey area itself does not provide primary denning or foraging opportunities. Existing anthropogenic disturbances would likely deter this species from utilizing the site.
Lasiurus blossevillii	Western red bat	—	—	Group 2	—	Roosts primarily within trees throughout a wide range of habitat, from sea level to mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected by dense canopies and have open areas in the understory for foraging.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
Lepus californicus bennettii	Black-tailed jackrabbit	—	—	Group 2	—	Open desert scrub with suitable cover and burrowing substrate. Burrows beneath desert shrubs and loose friable soils.	**Low Potential to Occur.** No suitable burrowing habitat or primary foraging habitat occurs within the survey area. This species has a low potential to forage within impact area.
Myotis ciliolabrum	Small-footed myotis	—	—	Group 2	—	Wide range of habitat types however primarily within arid wooded and brushy uplands, including open stands in forests and woodlands, adjacent to water. Caves, buildings, mines, and crevices used for refuge.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Myotis evotis	Long eared myotis	—	—	Group 2	—	Found in all brush, woodland and forest habitats from sea level to about 9000 ft. Prefers coniferous woodlands and forests. Nursery colonies in buildings, crevices, spaces under bark, and snags. Caves used primarily as night roosts.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
Myotis thysanodes	Fringed myotis	—	—	Group 2	—	Found in a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood and hardwood-conifer. Uses caves, mines, buildings, or crevices for maternity colonies and roosts.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
Myotis volans	Long legged myotis	—	—	Group 2	—	Found in brush, woodland, and forest habitats above 4,000 ft, especially coniferous woodlands and forests. Uses trees for day roosts, and caves and mines for night roosts. Nursery colonies under bark or in hollow trees, also crevices or buildings.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur. The area is below this species known elevation range.
Myotis yumanensis	Yuma myotis	—	—	Group 2	—	Uses open water near woodlands and forests. Maternity colonies in caves, mines, buildings, or crevices.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Neotoma lepida intermedia	San Diego desert woodrat	—	SSC	Group 2	—	Typically occurs in coastal scrub throughout Southern California. Prefers moderate to dense canopies and are particularly abundant in rock outcrops, and rocky cliffs and slopes.	**Not Likely to Occur.** Marginal rock outcrops occur within a limited portion of the survey area; however, no suitable nesting habitat occurs within the proposed impact area. Existing anthropogenic disturbances would likely deter this species from utilizing the site.
Nyctinomops macrotis	Big free-tailed bat	—	SSC	Group 2	—	Can be found in low-lying arid areas throughout Southern California. Needs high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.
Nyctinomops femorosaccus	Pocketed free-tailed bat	—	SSC	Group 2	—	Occurs in arid areas associated with Pine-Juniper woodlands, desert scrub, palm oasis, desert wash, and desert ripa. Specifically in rocky areas with high cliffs.	**Not Likely to Occur.** No suitable roosting or foraging habitat occurs within the survey area. This species is not likely to occur.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Odocoileus hemionus	Southern mule deer	—	—	Group 2	—	Mule deer occupy a wide range of habitat types within their home range. In San Diego County, this species prefers more arid, open situations.	**Not Likely to Occur.** This species may roam through the general vicinity of the survey area however the survey area itself does not provide primary denning or foraging opportunities. Marginally suitable foraging habitat occurs within limited portions of the survey area, however the impact area itself does not provide suitable resources. Existing anthropogenic disturbances would likely deter this species from utilizing the site.
Onychomys torridus ramona	Southern grasshopper mouse	—	SSC	Group 2	—	Occurs in desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions & orthopteran insects.	**Not Likely to Occur.** No portions of the survey area are currently characterized by this species preferred habitat. This species is unlikely to occur in the area.

Species		Status				Required Habitat	Potential to Occur/ Known Occurrence/ Suitable Habitat
Scientific Name	Common Name	Federal	State	San Diego County	Other		
Taxidea taxus	American badger	—	SSC	Group 2	—	Prefers herbaceous, shrub, and open stages of most habitats with dry, friable soils. Preys on burrowing rodents.	**Not Likely to Occur.** This species may roam through the general vicinity of the survey area however the survey area itself does not provide primary denning or foraging opportunities. Marginally suitable foraging habitat occurs within limited portions of the survey area, however the impact area itself does not provide suitable resources. Existing anthropogenic disturbances would likely deter this species from utilizing the site.

Federal		**State**		**Other**
FE	Federal Endangered	SE	State Endangered	**Other**
FT	Federal Threatened	ST	State Threatened	San Diego County Group 1
PFT	Proposed Federal Threatened	SSC	California Species of Concern	San Diego County Group 2
C	Candidate for Federal Listing	FP	Fully Protected Species	
				BLM: Sensitive
				G Global Ranking Rarity
				S State Ranking Rarity

Not Likely to Occur - There are no present or historical records of the species occurring on or in the immediate vicinity, (within 3 miles) of the survey area and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the survey area.

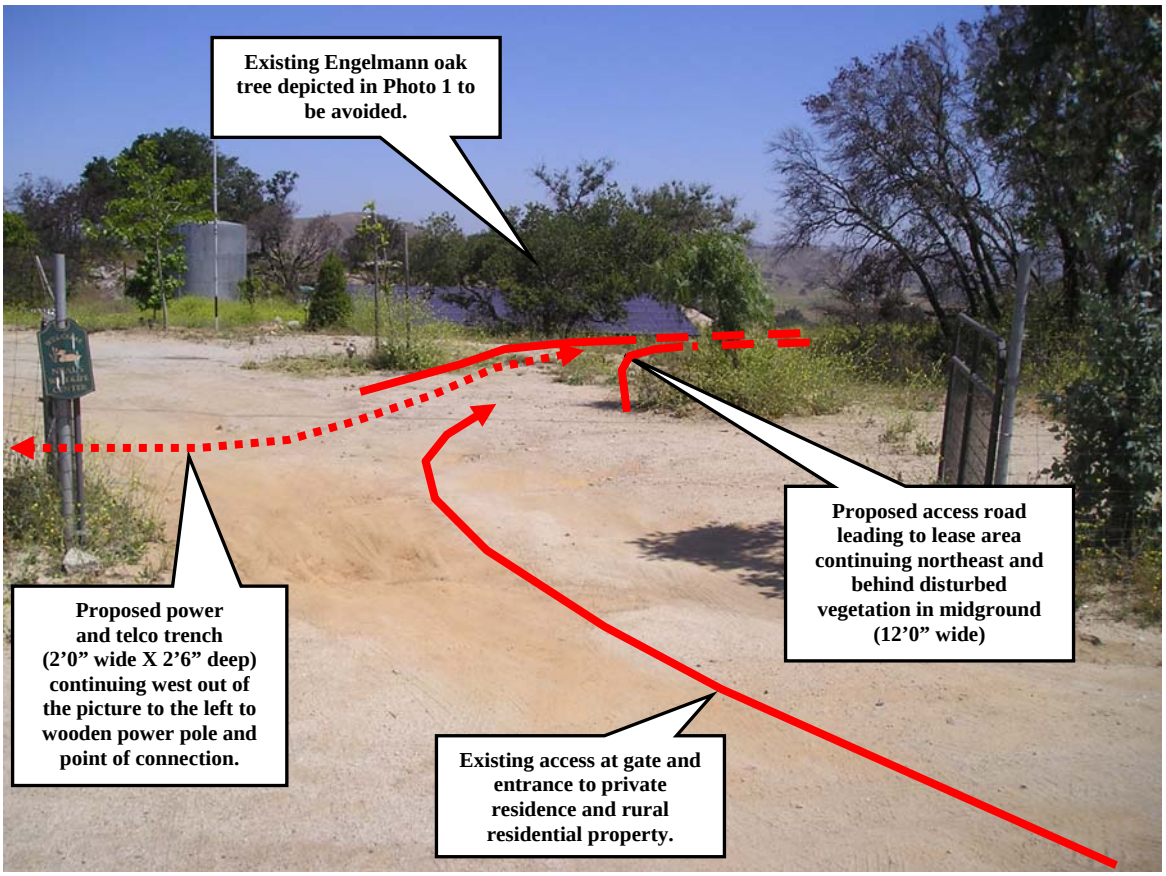
Low Potential to Occur - There is a historical record of the species in the vicinity of the survey area and potentially suitable habitat on the survey area, but existing conditions, such as density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation, substantially reduce the possibility that the species may occur. The survey area is above or below the recognized elevation limits for this species.

Moderate Potential to Occur - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the survey area, but there is not a recorded occurrence of the species within the immediate vicinity (within 3 miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.

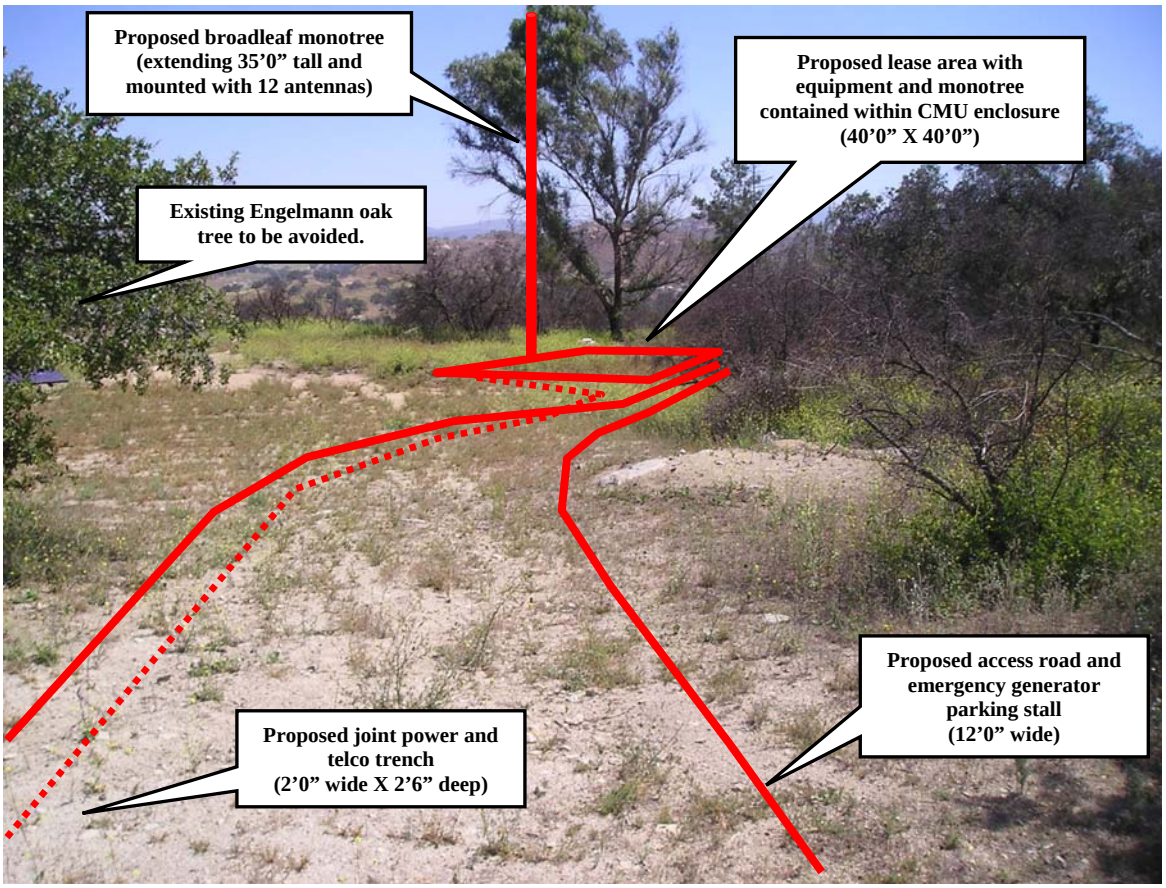
High Potential to Occur - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the survey area (within 3 miles).

Species Present - The species was observed on the survey area at the time of the survey or during a previous biological survey.

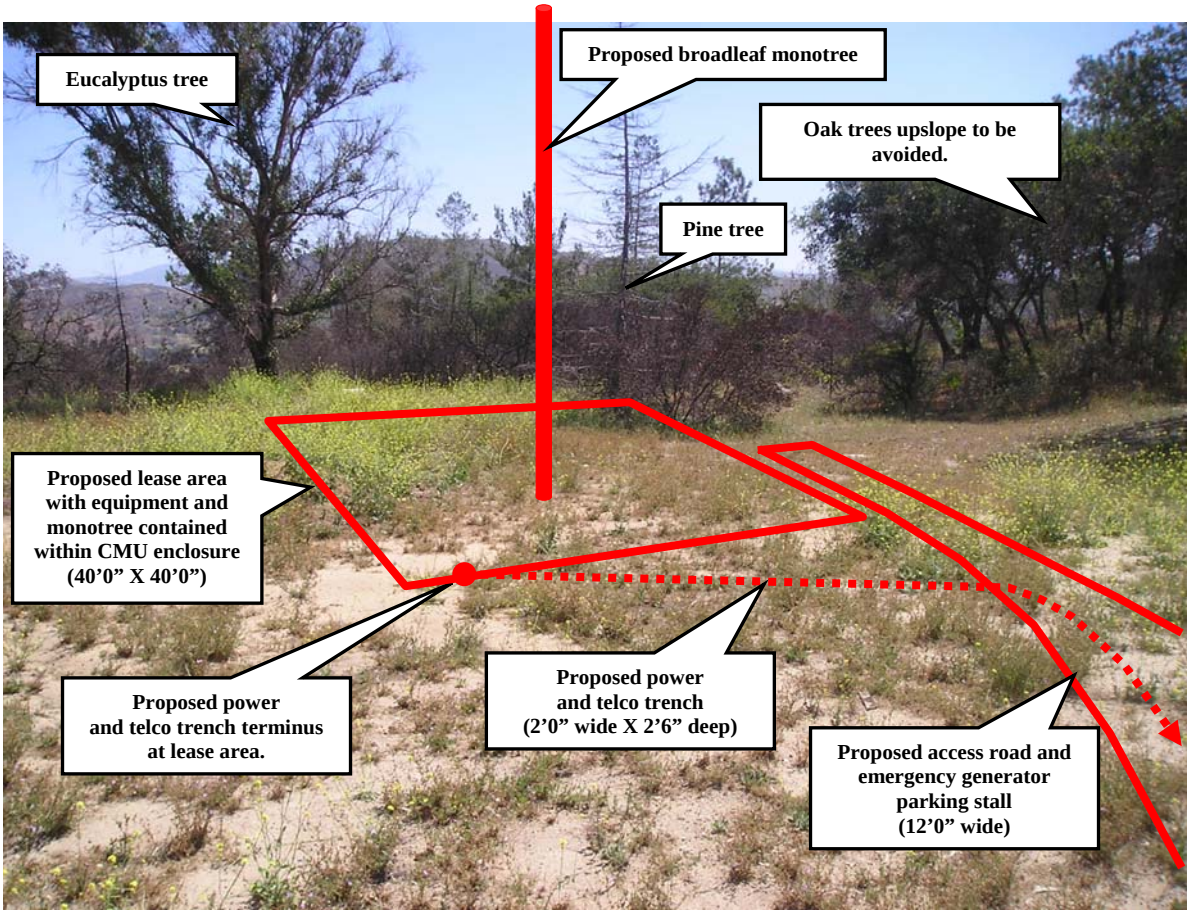
Attachment C: Site Photographs



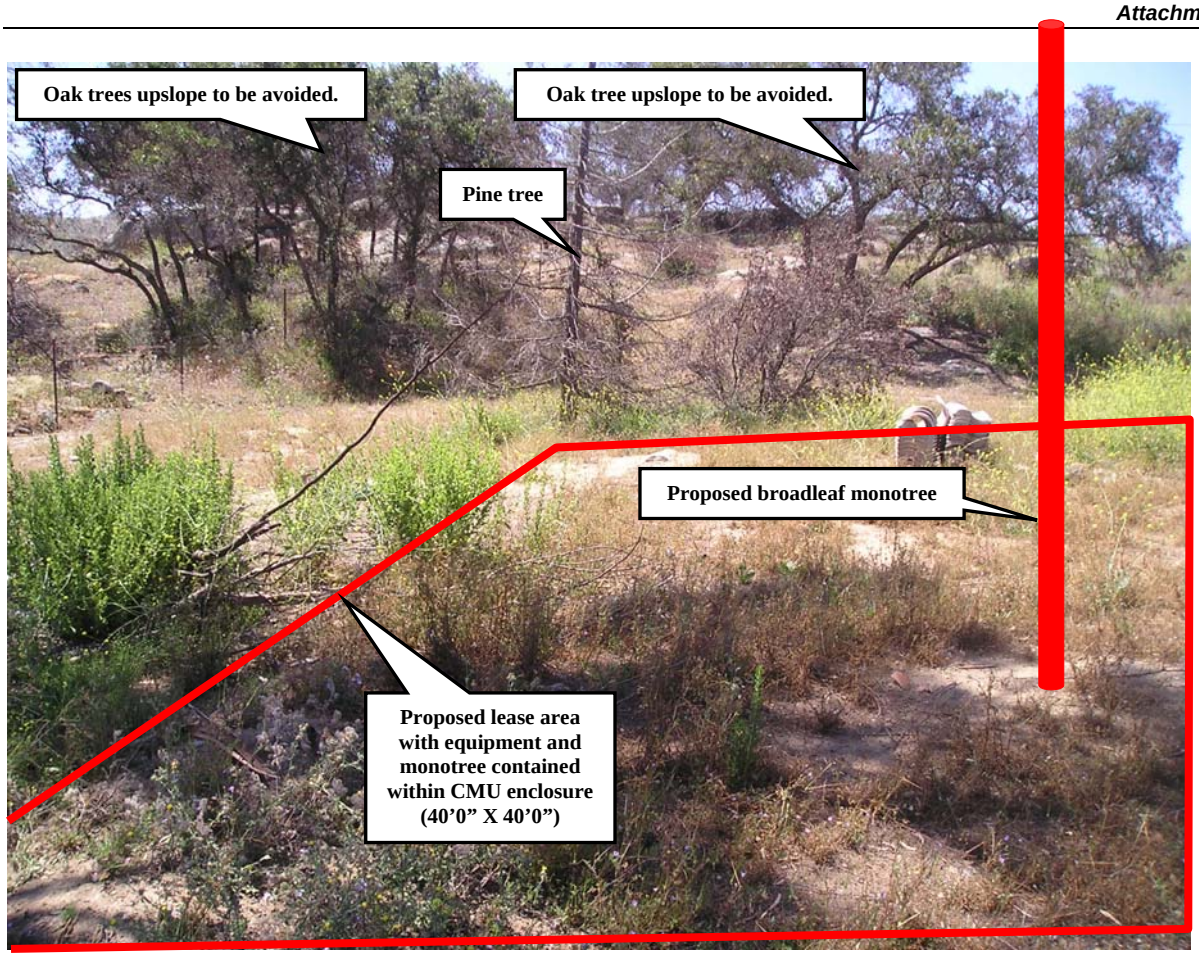
Photograph 1 - Approximate location of southwestern extent of proposed access road and middle sections of proposed utility trench. Also, existing access at gate and entrance to private driveway. Note that all proposed develpments are contained within existing disturbed land on the rural residential property. A small Engelmann oak (*Quercus engelmannii*) is depicted in the center midground of this photo. This oak and all other oaks will be avoided. No significant impacts are anticipated to any above- and below-ground oak resources.



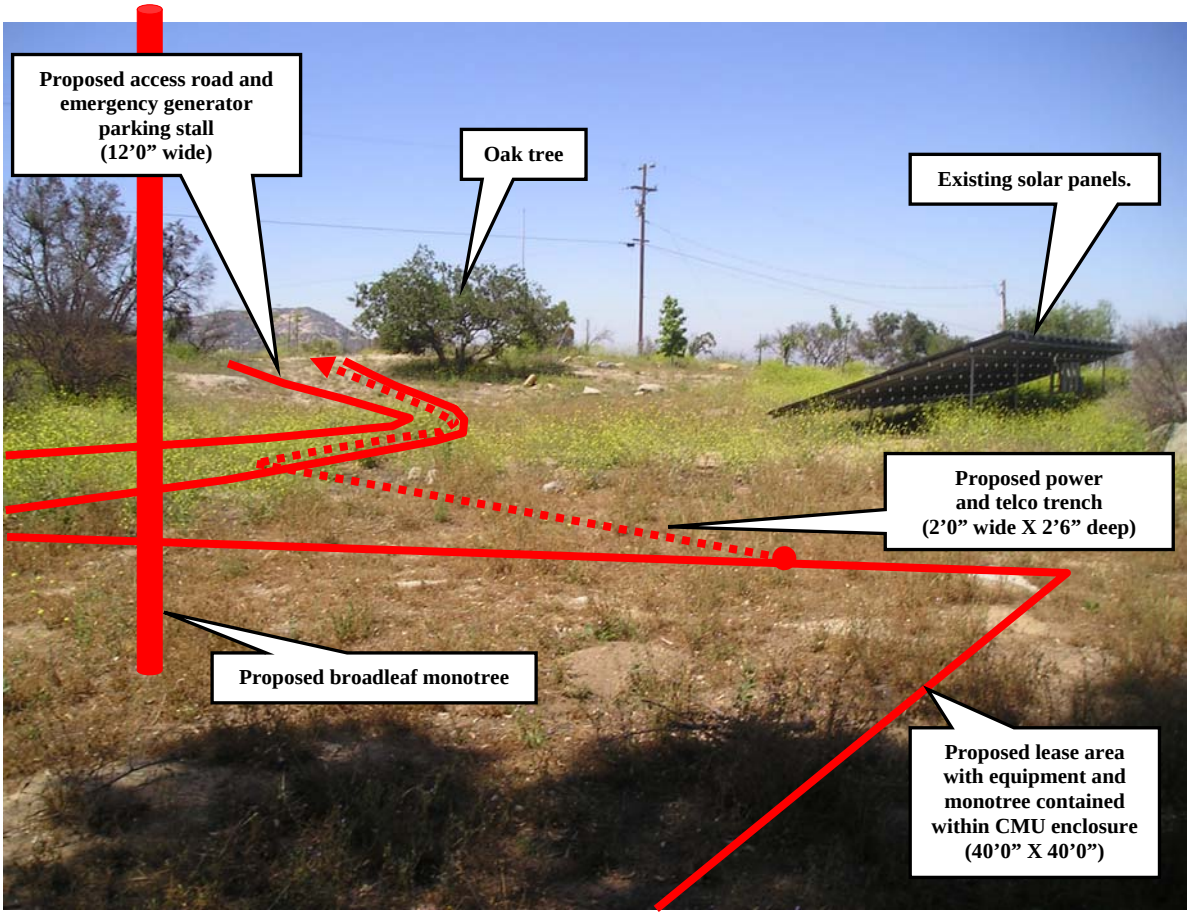
Photograph 2 – Approximate location of proposed lease area (with monotree, equipment, and retaining wall contained within), utilities trench, and access road and emergency generator parking stall leading up to the lease area. Photo taken from existing dirt driveway for the private residence faing northeast toward the proposed lease area. Note that all proposed develpments are contained within existing disturbed land on the rural residential property. The small Engelmann oak from Photo 1 is depicted in left side of picture in midground. No direct impacts to this or any other existing oak trees are anticipated.



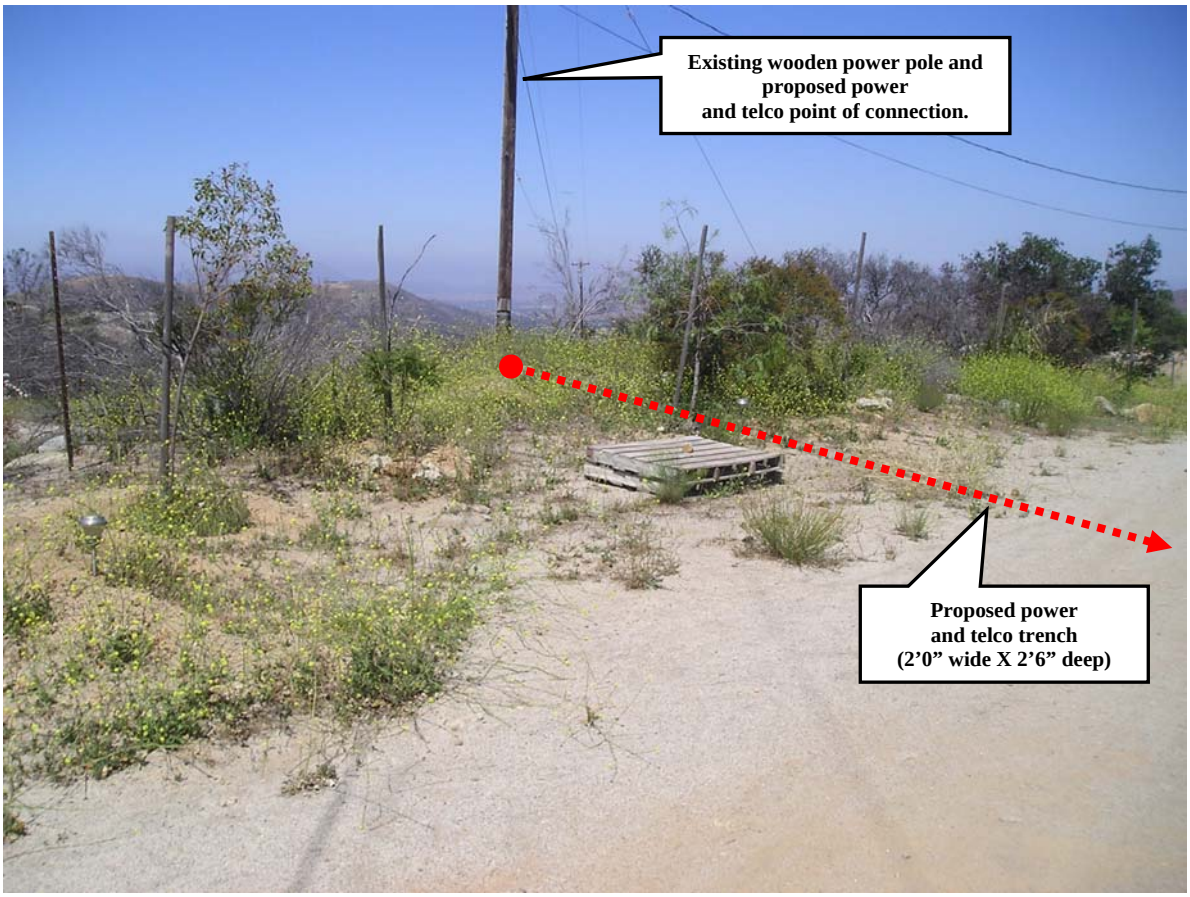
Photograph 3 - Approximate footprint and location of proposed lease area (with monotree, equipment, and retaining wall contained within), utilities trench, and access road and emergency generator parking stall leading up to the lease area. Photo taken west of the proposed lease area and immedaiately north of existing solar panels on the property, facing east. Note that all proposed develpments are contained within existing disturbed land on the rural residential property. Also note location of existing Eucalytus, pine, and oak trees in background left, center, and right of photo. Project developments are set back at an excess of 50 feet from the canopy of existing oak tree in background right. No significant impacts are anticipated to any above- and below-ground oak resources.



Photograph 4 - Approximate footprint and location of proposed lease area (with monotree, equipment, and retaining wall contained within). Photo taken from beneath existing Eucalyptus tree at northeast corner of lease area, facing south. All proposed develpments are contained within existing disturbed land on the rural residential property. Note location of existing pine tree in center midground and oak trees in background left and right of photo. Also note that project developments are set back at an excess of 50 feet from the canopy of existing oak tree in background left and right. No significant impacts are anticipated to any above- and below-ground oak resources.



Photograph 5 - Approximate footprint and location of proposed lease area (with monotree, equipment, and retaining wall contained within) utilities trench, and access road and emergency generator parking stall leading up to the lease area. Photo taken from beneath existing Eucalyptus tree at northeast corner of lease area, facing southwest. All proposed develpments are contained within existing disturbed land on the rural residential property. Note location of existing solar panels and small Engelmann oak tree in center background of photo. No significant impacts are anticipated to any above- and below-ground oak resources.



Photograph 6 - Approximate location of proposed utilities trench terminus at wooden power pole point of connection. Photo taken from gate and entrance to rural residential property, facing west. All proposed develpments are contained within existing disturbed land on the rural residential property.

Attachment D: CNDDB Field Survey Form

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 06/12/2008

For Office Use Only

Source Code _____ Quad Code _____

Elm Code _____ Occ. No. _____

EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Aspidoscelis hyperythra*

Common Name: orange-throated whiptail

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Karl L. Osmundson, Tommy K. Molioo

Address: 4045 Peninsula Drive

E-mail Address: kosmundson@brandman.com

Phone: (760) 519-5954

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

1 # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☑ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: San Diego Landowner / Mgr.: Private

Quad Name: Ramona, California Elevation: 2,645 ft (806.2 m)

T 13 S R 2 E Sec 14, NW ¼ of NW ¼, Meridian: H☐ M☐ S☑ Source of Coordinates (GPS, topo. map & type): USGS 7.5"

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model _____

DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ *OR* Geographic (Latitude & Longitude) ☑

Coordinates: 33^02'58.48"N
116^45'12.24"W

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope):*

One specimen observed basking on small granite outcrop within (chamise chaparral) scrub understory of an oak woodland. Dominate tree species include Quercus englemannii and Quercus agrifolia, dominate shrub species include Adenostoma fasciculatum, Eriogonum fasciculatum, and Lotus scoparius, dominate herbaceous species include Avena barbata, Bromus madritensis ssp. rubens, Hirschfeldia incana, and Phacelia distans. The entire area is recovering from fire disturbance. Understory consists largely of early seral species.

Other rare taxa seen at THIS site on THIS date:
(separate form preferred)

Site Information

Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☑ Fair ☐ Poor

Immediate AND surrounding land use: Rural residential property and constrained undeveloped land.

Visible disturbances: Vegetation clearing, soil disturbance, dumping, equipment storage, off-highway vehicle use, domestic pets, recent fire (2007).

Threats: Development

Comments: Site located within private rural residential property. No developments proposed at species occurrence.

Determination: *(check one or more, and fill in blanks)*

☑ Keyed (cite reference): Lemm (2006)
☐ Compared with specimen housed at: _____
☑ Compared with photo / drawing in: Stebbins (2003), Lemm (2006)
☐ By another person (name): _____
☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☐
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

Mail to:
California Natural Diversity Database
Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@dfg.ca.gov

Date of Field Work (mm/dd/yyyy): 06/12/2008

For Office Use Only

Source Code _____ Quad Code _____

Elm Code _____ Occ. No. _____

EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Quercus engelmannii*

Common Name: Engelmann oak

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 4 Subsequent Visit? ☐ yes ☑ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☑ no ☐ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: Tommy K. Molioo, Karl L. Osmundson

Address: 220 Commerce, Suite 200
Irvine, Ca. 92602

E-mail Address: tmolioo@brandman.com

Phone: (714) 508-4100

Plant Information

Phenology: 100 % vegetative 0 % flowering 0 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

***Location Description* (please attach map AND/OR fill out your choice of coordinates, below)**

Located within the grounds of a private residence at 26652 Littlepage Lane, east of the City of Ramona in unincorporated San Diego County, CA.

County: San Diego Landowner / Mgr.: Private

Quad Name: Ramona, California Elevation: 2,645 ft (806.2 m)

T 13 S R 2 E Sec 14, NW ¼ of NW ¼, Meridian: H☐ M☐ S☑ Source of Coordinates (GPS, topo. map & type): USGS 7.5"

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model _____

DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ ***OR*** Geographic (Latitude & Longitude) ☑

Coordinates: 33^02'58.48"N
116^45'12.24"W

Habitat Description *(plant communities, dominants, associates, substrates/soils, aspects/slope):*

One specimen observed within disturbed habitat and a small stand observed within a rocky outcrop along the northern portion of the property. Disturbed, but contains oak woodland and chamise chaparral communities along the periphery of the property. Dominate tree species include Quercus englemannii and Quercus agrifolia, dominate shrub species include Adenostoma fasciculatum, Eriogonum fasciculatum, and Lotus scoparius, dominate herbaceous species include Avena barbata, Bromus madritensis ssp. rubens, Hirschfeldia incana, and Phacelia distans. The entire area is recovering from fire disturbance. Understory consists largely of early seral species.

Other rare taxa seen at THIS site on THIS date: Orange-throated whiptail (Aspidoscelis hyperythra)
(separate form preferred)

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☐ Fair ☑ Poor

Immediate AND surrounding land use: Rural residential property and constrained undeveloped land.

Visible disturbances: Vegetation clearing, soil disturbance, dumping, equipment storage, off-highway vehicle use, domestic pets, recent fire (2007).

Threats: Development

Comments: Site located within private rural residential property. Species occurrence located adjacent to utility line trench route, and within 50 feet of proposed permanent development.

Determination: *(check one or more, and fill in blanks)*

- ☑ Keyed (cite reference): Lemm (2006)
- ☐ Compared with specimen housed at: _____
- ☑ Compared with photo / drawing in: Lemm (2006), Lightner (2006)
- ☑ By another person (name): Karl Osmundson
- ☐ Other: _____

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☑
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☑ no ☐